TRANSFORMATIONAL LEADERSHIP:

BEHAVIORS, OUTCOMES, AND

PREDICTORS

by

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ABSTRACT

Coaches are integral in determining the quality of the athlete experience. Therefore, it is important to understand leadership styles that foster positive outcomes. Transformational leadership (TL) is proposed as a means of positively impacting followers by motivating them to perform beyond expectations through influencing beliefs and values. While TL has been the focus of a plethora of studies in business, medical, and military domains, it has just recently begun to gain attention in sport. Therefore, TL in sport was examined in three studies in this dissertation. The first study qualitatively investigated the nature of TL in sport. Little is known about what constitutes TL in a sport setting from a qualitative perspective. Eleven female collegiate athletes were interviewed about their positive experiences with coaches. Thematic analysis of the interviews revealed four major themes: caring, motivating, teaching life lessons, and trusting. Similarities and differences emerged when comparing the themes with other models of TL. Unique elements of sport that may affect the manifestation of transformational leadership in sport include physical coach-athlete interactions, group size, and the motivational reasons for participation. The second study examined the contribution of coach TL to positive youth development (PYD) related to sport competencies and personal attributes. Players from 28 competitive youth basketball teams completed questionnaires about their coaches' TL and two measures of PYD.

Multilevel analysis indicated that coach TL contributed to PYD sport competencies (β = 0.18, $p < .001$) and PYD personal attributes ($\beta = 0.27$, $p = .002$). Cross-level (individual by team) interactions of TL were present for PYD sport competencies ($\beta = .62$, $p < 0.001$). The third study examined motivational goal orientations and coaching efficacy as factors that might influence the development of TL in coaches. One hundred twenty-two coaches of youth basketball teams completed an online questionnaire. A structural equation model yielded an acceptable fit $\chi^2_{122} = 190.19$, $p < .001$, CFI = .91, and SRMR = .07. Only the regression pathway connecting coaching efficacy with TL was significant ($r = 0.69$, $p < .001$). These results suggest that coaches' TL behaviors can be enhanced by promoting their sense of coaching efficacy.

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CHAPTER 1

INTRODUCTION

Coaches play a major role in the quality of the experiences athletes have in sport (Mageau & Vallerand, 2003; McGuire, 1992; Weathington, Alexander, & Rodebaugh, 2010). Specifically, coaches can influence both positive and negative outcomes associated with sport participation. Furthermore, it is also the case that competitive sport is replete with negative actions of coaches whose mistreatment of athletes is driven partly by the pressure to win. Clearly, a coach's influence permeates the athletic experience. Exploring leadership practices among coaches is valuable, as it may help us understand the variability of athletes' experiences and foster a more positive experience for athletes in sport.

Significance of Studies

Although athletic coaching necessitates a focus on winning, the development of the individual is also an important goal (Cusack & Schraibman, 1986; Kidman & Lombardo, 2010; Miller & Kerr, 2002). Increasing our understanding of how to optimize patterns of coaching leadership that negotiates these seemingly competing goals is an important focus. One form of leadership associated with both positive performance-

related and developmental outcomes is transformational leadership (TL). Borrowed from business literature, TL has recently garnered support as a salient leadership style for coaches in sport (Callow, Smith, Hardy, Arthur, & Hardy, 2009; Charbonneau, Barling, & Kelloway, 2001; Vella, Oades, & Crowe, 2012). A transformational leader inspires and uplifts followers to achieve more than they believed possible through a sense of shared vision and value congruence between leader and followers (Bass,1985). However, little is known about what factors contribute to becoming a transformational leader in sport, what behaviors constitute TL in this context, and the outcomes experienced by the athlete as a result of having a transformational coach. Thus, this research is poised to fill voids in the sport literature regarding transformational leadership. This dissertation is comprised of three studies: a qualitative exploration of TL in sport, an examination of outcomes of coach TL in sport, and an investigation of potential contributing factors in the development of TL among coaches.

Theoretical Foundation

Models help to clarify and organize research. In sport literature, a variety of models of coaching effectiveness have been suggested. For example, the model of multidimensional leadership captures the importance of congruence between preferred and actual coaching behaviors (Chelladurai, 2012). The mediational model of leadership suggests that situational factors and athletes' perspectives mediate the effectiveness of coach behaviors (Smoll & Smith, 1989). Lastly, Mageau and Vallerand's (2003) motivational model of the coach-athlete relationship focuses on the factors that influence coach behaviors toward the athlete, which then impact the coach-athlete relationship

(Mageau & Vallerand, 2003). Given these varied models and the complex mixture of variables involved in sport leadership, it is likely that a comprehensive approach would synthesize the common and critical elements of coaching effectiveness.

Horn's (2008) working model of coaching effectiveness integrates elements of these different models, providing a broad framework incorporating antecedents, coach behaviors, and outcomes (performance and psychological) experienced by athletes (see Figure 1.1). The studies included in this dissertation are guided by Horn's model. While TL is well articulated in other settings, it is important to provide an overarching framework specific to sport, in which TL can be situated. Within Horn's model, TL is situated as a coach behavior (box 5).

Three major points summarize Horn's model (Figure 1.1). First, a variety of antecedent factors inform coach behaviors in sport settings. Horn suggests three general antecedent categories: sociocultural context, organization climate, and coaches' personal characteristics. Although these factors affect coach behaviors, the model suggests that this relationship is mediated by coach expectancies, values, beliefs, and goals (box 4). Second, the effect of coach behaviors on athlete performance can be direct or indirect, but it is mostly mediated by the athletes' perception of coach behavior (box 8). Third, Horn acknowledges that situational and individual difference variables determine the effect of coaching behaviors (boxes 6-10). This model of coaching effectiveness provides a clear framework of the relationships between behaviors (study 1), outcomes (study 2), and antecedents (study 3) revolving around coaching. Horn (2008) hypothesizes that several factors contribute to coach behaviors. Specifically, coach values, expectancies, beliefs, and goals may be predictors of coach behaviors (Figure 1.1, box 4). Study 3 investigated

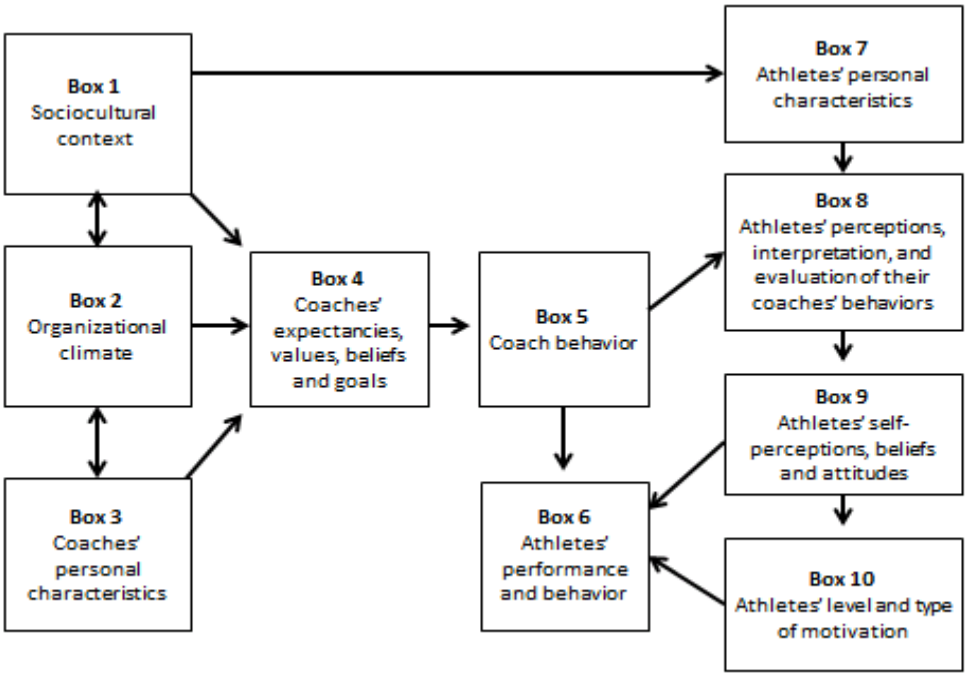

Figure 1.1 Horn's Model of Coaching Effectiveness

two possible determinants of TL: coach motivational goal orientations (reflective of coach values and goals) and coaching efficacy (reflective of coach beliefs), positioned in box 4 for these studies.

Transformational Leadership

Similar to models of coaching effectiveness, differing models of TL exist. In previous leadership literature, leaders have been categorized as task-oriented or relationship-oriented (Feidler, 1964), or democratic, autocratic, or laissez-faire leaders (Lewin, Lippit, & White, 1939). Some leadership theories focus on leadership traits (Kirkpatrick & Locke, 1991; Zaccaro, Kemp, & Bader, 2004) or skills (Katz, 1955; Mumford, Zaccaro, Connelly, & Marks, 2000) that lead to effective leadership behaviors. Others argue that effectiveness is based on the situation (Blanchard, Zigarmi, & Nelson, 1993). Although

the focus of each leadership perspective is unique, the transactional nature of the leader-follower relationship has been rather consistent. Transactional interactions, wherein rewards or punishment are given based on performance, are a prescription for mediocrity because followers do only what is asked (Bass, 1990; Bass, 1997). On the other hand, transformational leaders are particularly impactful because elevating followers is the primary goal.

Transformational leadership contrasts sharply with other styles of leadership. Following Burns' (1978) initial idea of transforming leadership, Bass (1985) further refined the conceptualization of the construct and created a measure for TL (Multifactor Leadership Questionnaire; MLQ). He suggests that a transformational leader inspires and uplifts followers to achieve more than they believed possible through a sense of shared vision and value congruence between leader and followers. In this model, four components characterize TL: inspirational motivation, intellectual stimulation, individualized consideration, and idealized influence. The more leaders adopt these components the greater transformative impact they will have on followers. *Idealized influence* refers to the admiration, respect, and trust that followers have for their leader. The leader is seen as a role model who has high moral and ethical standards. *Inspirational motivation* suggests that a transformational leader will motivate his or her followers by providing meaning and challenge in the work of followers. The leader inspires teamwork and vision among followers that leads to greater enthusiasm in their work. Leaders provide i*ntellectual stimulation* when they encourage creativity and new ways of thinking about problems. Leaders using intellectual stimulation include followers in decision-making processes. *Individualized consideration* is evident in the

way leaders give attention to the needs of followers' for personal growth. The leader interacts with each individual as a whole person, recognizes individual needs, and remembers important information about each person.

Another model of TL was created by Podsakoff and colleagues (1990). They examined TL among employees and identified six transformational behaviors (identifying and articulating a vision, providing an appropriate role model, fostering acceptance of group goals, high performance expectations, providing individualized support, and intellectual stimulation) and one transactional behavior (contingent reward). Recent conceptualizations within sport have grown from these initial views of the construct. Specifically, the development of the Differentiated Transformational Leadership Inventory (DTLI; Callow et al., 2009) in sport posits six specific behaviors of transformational leaders (inspirational motivation, intellectual stimulation, individualized consideration, fostering acceptance of group goals, high expectations, appropriate role model) and one transactional behavior (contingent reward).

Research indicates that TL is a powerful construct in a variety of settings (Bass & Riggio, 2006; Wang, Oh, Courtright, & Colbert, 2011). For example, TL enhances performance and increases positive outcomes for followers in business (LeBrasseur, Whissell, & Ojha, 2002), the military (Bass, Avolio, Jung, & Berson, 2003), government (Wofford, Whittington, & Goodwin, 2001), nursing, (Bowles & Bowles, 2000; Murphy, 2005), and education (Harvey, Royal, & Stout, 2003). Additionally, TL increases performance, motivation, and attitudes across levels of organization, type of organization, and geographic region (Wang et al., 2011).

Recently, transformational approaches to leadership have been examined in sport.

Initial findings suggest that coaches' transformational behaviors are associated with greater intrinsic motivation of athletes (Charbonneau, Barling, & Kelloway, 2001), increased athlete effort (Rowold, 2006), and social and task cohesion among teams (Callow et al., 2009). Additionally, the impact of narcissism as a moderating variable (Arthur, Woodman, Ong, Hardy, & Ntoumanis, 2011), intrateam communication as a mediator (Smith, Arthur, Hardy, Callow & Williams, 2013), and peer TL (Price & Weiss, 2013) have been considered. However, important limitations of previous research in sport include the utilization of conceptualizations of TL borrowed from non-sport domains, the lack of research on antecedent contributors to TL, and investigating outcomes of TL using inappropriate or less effective statistical methods. Understanding the essence of TL in sport is crucial for further research aiming to establish the validity of the construct. Although previous studies have provided initial evidence of positive outcomes resulting from TL, investigating a range of other follower consequences of coach TL is crucial to developing TL in sport. Given the host of desirable outcomes, investigating potential antecedents of TL would allow greater comprehension of how to foster these positive outcomes. Therefore, research focusing on antecedents and outcomes of TL in sport are essential to advancing our knowledge of TL.

Positive Youth Development as an Outcome of Transformational Leadership

In reviewing articles and salient conceptual models on coaching effectiveness, Côté and Gilbert (2009) advocated for the inclusion of outcomes beyond sport as a significant part of coaching effectiveness. Similarly, Vella and colleagues (2012) suggest that in order to extend the line of research on TL in sport, it is important to connect this

construct specifically to developmental outcomes beyond sport. The connection to TL seems particularly salient because the essence of TL is to transform individuals into better people. Thus, the focus of study 2 is on athlete outcomes associated with the perception of transformational coaching behaviors.

Evidence suggests that the influence of coaches can reach beyond athletics (Gould & Carson, 2011; Gould, Collins, Lauer, & Chung, 2007). Successful coaches view player development and teaching life skills as an integral part of their job (Gould et al., 2007). Additionally, empirical research suggests that from athletes' perspectives, high school coaches' behaviors are related to the development of life skills (Gould & Carson, 2010). Examinations of coach influence beyond the immediate sport experience reaches into and shares common ground with youth development. Over the past few decades, a major paradigm shift has taken place in the area of youth development, wherein youth are now viewed as potential resources for community contribution that can be strengthened rather than as potential problems for society that need fixing (Damon, 2004). According to seminal work conducted by the Search Institute, the presence of certain developmental assets have been identified as a specific set of skills, experiences, relationships, and behaviors that enable youth to become successful and thriving adults (Scales, Benson, Leffert, & Blyth, 2000). Based on the emphasis of enhancing positive attributes and cultivating important developmental experiences, this area of research is referred to as positive youth development (PYD).

Significantly, TL behaviors are associated with a variety of positive outcomes (Bass & Riggio, 2006). In other words, these leaders influence those they lead in positive ways. As previously mentioned, Vella and colleagues (2012) suggested the need to

extend current literature on TL in sport by connecting coach TL behaviors to developmental outcomes beyond sport. The focus of many PYD programs is the application of lessons learned and the transfer of acquired characteristics to real-world settings. Because TL suggests change, it is important to determine whether or not these leadership behaviors are related to follower outcomes beyond sport. Until now, research has not explored the connection between TL and possible outcomes that tap into personal growth and self-actualization of followers.

Goal Orientations and Coaching Efficacy as Predictors of Transformational Leadership

In sport settings, little research has examined what characteristics might contribute to the development of transformational leaders. Zacharatos, Barling, and Kelloway (2000) examined the influence of parents' TL behaviors on the development of TL behaviors in their adolescent athletes in a team setting. They sought to determine if youth leadership was a function of parental leadership style. Findings indicated that TL behaviors of parents were adopted by their children when interacting with athletes on a team. Given that Horn's (2008) model suggests that coach values, expectancies, beliefs, and goals are predictors of coach behaviors, we proposed two factors that may contribute to TL: motivational goal orientations and coaching efficacy.

According to Achievement Goal Theory (AGT; Nicholls, 1984), behaviors are goal driven. Based on this knowledge and the supposition that success is an important goal for leaders, it is logical to expect that characteristics of coaching behaviors are linked to coaches' motivational goal orientations. Evidence in non-sport domains

suggests that motivational goals contribute to greater TL behaviors. For example, Barbuto (2005) found that school administrators who were more intrinsically motivated displayed more TL behaviors. Trepanier and colleagues (2012) found strong positive correlations between autonomous motivation and self-reported TL in principals and vice-principals in school settings. Overall, these findings highlight that more intrinsically or integrated goals foster TL. Although these studies were conducted in education settings, the sport setting shares similarities. For example, both students and athletes strive for achievement. Also, the structures of school and sports involve the important contributions of leaders; teachers and coaches greatly influence the experience of students and athletes. Duda and Nicholls (1992) also made the case for the application of goal orientations across domains. These similarities lend support for similar relationships between goal orientations and TL within sport.

In addition to the influence of motivational goal orientations on behavior, Horn's (2008) model also suggests that coaches' beliefs will influence their behaviors. One of the most powerful and influential beliefs in psychology is self-efficacy, the personal belief in one's ability to carry out a specific task (Bandura, 1997). Coaching efficacy is the extent to which coaches believe they can influence the learning and performance of their athletes (Feltz, Chase, Moritz, & Sullivan, 1999). Previous research supports the connection between coaching efficacy and leader behaviors. For example, Sullivan and Kent (2003) identified coaching efficacy as a predictor of general leadership behaviors. When coaching efficacy was high, leaders felt that they were more effective instructors. Specifically, coaches who were high in motivational efficacy and teaching efficacy rated themselves as able to provide positive feedback and instruction, and engaged in these

behaviors to a greater degree.

General Research Aims

The aim of study 1 was to explore the nature of TL in sport through semi-structured interviews with female collegiate athletes. Given the importance of coach influence on youth development, the primary aim of study 2 was to examine the influence of athletes' perceptions of coach TL behaviors on indicators of positive youth development in adolescent athletes. The primary aim of study 3 was to examine possible predictors of TL. Specifically, do motivational goal orientations and coaching efficacy predict coach perceptions of TL behaviors?

Study 1 Research Questions, Hypotheses, and Analyses

Research Question 1: What is the nature and essence of TL in sport?

Based on the qualitative design of the study, no formal hypotheses were supplied. However, it was likely that interview data would suggest differences between TL in different contexts.

Study 2 Research Questions, Hypotheses, and Analyses

Research Question 2: Do teams with higher average perceived transformational coaching behavior scores also have higher PYD outcomes?

It was hypothesized that teams receiving higher levels of transformational coaching would also report greater PYD outcomes. Additionally, it was expected that these relationships would vary from team to team. That is, teams who perceived their

coach to engage in more transformational leader behaviors would have greater PYD outcomes.

Research Question 3: Relative to other athletes on a given team, do athletes with higher perceived transformational coaching behavior scores also have higher relative PYD outcomes?

Based on previous research, it was hypothesized that individuals who reported greater transformational coaching would also have higher PYD outcomes relative to their teammates.

Research Question 4: Does coach TL influence PYD within sport and beyond sport?

It was hypothesized that TL would influence PYD sport competencies and positive personal attributes. However, it was expected that perceptions of coach transformational behaviors would have more influence on the PYD outcomes related to sport competencies, than on the outcomes associated with personal attributes.

Multilevel modeling is a method of regression that recognizes the inherent hierarchical structure in some situations. Because individuals on a team share a head coach, the examination of the athletes' perceptions and developmental outcomes will not be independent of one another. Generally, coach leadership differs from team to team. Therefore, a multilevel framework is appropriate to determine if the effect of a coach's transformational behaviors on athlete developmental outcomes vary from team to team. Multilevel modeling will be used to determine the influence of head coach TL on the developmental outcomes of teams and individuals at both between-team (group) and within-team (individual) levels from the athletes' perspectives.

Study 3 Research Questions, Hypotheses, and Analyses

Research Question 5: Are motivational goal orientations and coaching efficacy related to a coach's TL?

Based on previous research, it is likely that coaching efficacy will be positively related to TL. It is unclear how task and ego orientations will be related to coach TL behaviors. However, it is reasonable to suggest that both task and ego orientations will likely be related to TL behaviors.

Given that multiple predictors were hypothesized to influence one dependent variable, structural equation modeling was used to determine relationships of coaching efficacy, task orientation, and ego orientation to TL from the coaches' perspectives.

CHAPTER 2

STUDY 1: EXPLORING THE NATURE OF TRANSFORMATIONAL LEADERSHIP IN SPORTS: A PHENOMENOLOGICAL EXAMINATION WITH FEMALE ATHLETES

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Exploring the nature of transformational leadership in sports: a phenomenological examination with female athletes

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Transformational leaders lift and inspire followers to achieve performance beyond expectations and realise their full potential. Transformational leadership fosters performance and increases positive outcomes in a variety of domains (e.g. business, military, and education) and may have a salient impact on the quality of athletes' sporting experiences. Bass identified four primary behavioural components of transformational leadership: idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration. Yet little is known about what constitutes transformational leadership in a sport setting from a qualitative perspective. This study addressed this issue by interviewing eleven female collegiate athletes about their positive experiences with current or former coaches. Thematic analysis of transcribed interview text revealed four major themes: caring, motivating, teaching life lessons, and trusting. Caring was exemplified by the coach taking the time and energy to establish a personal and individual relationship with athletes. Having high expectations and physically and mentally challenging athletes were salient aspects of motivating. Teaching life lessons was characterised generally by the high quality mentoring that transformative coaches engaged in with athletes. Lastly, trust was perceived when the athletes felt their coaches cared about them, were willing to relinquish some power, and acted in the best interests of the team. Similarities and differences emerged when comparing the themes with Bass', Podsakoff *et al.*'s, and Rafferty and Griffin's components of transformational leadership. Unique elements of sport that may affect the manifestation of transformational leadership in sport include physical coach–athlete interactions, group size, and the motivational reasons for participation.

Keywords: college athletes; females; coaching; caring; leaders

Transformational leaders 'motivate followers to achieve performance beyond expectations by transforming followers' attitudes, beliefs, and values as opposed to simply gaining compliance' (Bass 1985). Because coaches are uniquely positioned to impact the lives of athletes, transformational leadership may be important in enhancing the quality of athletes' sporting experiences (Gould *et al.* 2007). Research across a variety of settings including business (LeBrasseur *et al.* 2002), the military (Bass *et al.* 2003), government (Wofford *et al.* 2001), nursing, (Bowles and Bowles 2000,

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Murphy 2005), and education (Harvey *et al.* 2003) has highlighted the performance benefits for followers experiencing transformational leadership. The impact of transformational approaches to leadership has also been examined in sport. Initial findings suggest that coaches' transformational behaviours are associated with greater intrinsic motivation of athletes (Charbonneau *et al.* 2001), increased athlete effort (Rowold 2006), and social and task cohesion among teams (Callow *et al*. 2009). In addition, the influence of narcissism as a moderating variable between transformational leadership and athlete motivation (Arthur *et al.* 2011) has been examined, as has the mediating influence of intrateam communication on the relationship between transformational leadership and team cohesion (Smith *et al.* 2013). Athlete well-being (Stenling and Tafvelin 2014) and peer leadership (Price and Weiss 2013) have been examined in sport using a transformational leadership framework. Further, Vella *et al*. have established a line of research on transformational leadership that includes examinations of the construct's association with positive developmental experiences of youth athletes (2013a) and coaches training for youth sports (2013b). However, an important limitation of previous research in sport is the utilisation of conceptualisations of transformational leadership borrowed from non-sport domains. We found no studies that have qualitatively explored what transformational leadership consists of from the athlete's perspective in the sport context. Exploring athlete understandings, experiences and the meanings they attribute to transformational leadership is crucial for gaining further knowledge of the essence of transformational leadership within a sport context. Furthermore, gaining a deeper appreciation of the essence of transformational leadership in sport is integral for establishing the validity of the construct and for examining antecedents and outcomes of transformational leadership.

At the core of transformational leadership is the idea that a leader has a transforming, or elevating impact on his/her followers. Burns (1978) coined the term *transforming leadership.* He suggested that this form of leadership occurs as leaders engage their followers in a way that they 'raise one another to higher levels of motivation and morality' (Burns 1978, p. 37). Transformative leaders enlist and encourage followers to envision and pursue aspects of their better selves, thus eliciting positive change by appealing to followers' higher order needs of self-actualisation (Burns 1978). Bass (1985) extended these ideas by operationally defining and creating a framework and self-report measure of transformational leadership (Multifactor Leadership Questionnaire, Bass and Avolio 2000). According to Bass (1990), most leaders rely on a transactional relationship with their subordinates, wherein a leader requires an exchange of work for rewards. This transactional relationship, although necessary, requires the presence of other leader characteristics to promote performance from mediocrity to excellence. Research in the sport and military domains establishes this transactional relationship to be an important prerequisite to transformational leader behaviours (Rowold 2006, Hardy *et al.* 2010). Thus, a transformational leader augments the transactional style by motivating followers to accomplish more than is expected by raising awareness of the value of goals, encouraging followers to transcend their own self-interest for the aspirations of the group, and stimulating recognition of higher needs. Bass also suggests that transformational leaders motivate followers to achieve performance beyond expectations by transforming followers' attitudes, beliefs, and values as opposed to simply gaining compliance, a common reward–punishment practice in transactional-based leadership approaches. Finally, transformational leaders elicit positive changes

in their followers, who are then more motivated based on internalised values and beliefs. Therefore, an important tenet of transformational leadership is the underlying notion that transformational leaders positively influence, lift, and transform followers (Burns 1978, Bass and Steidlmeier 1999, Dvir *et al.* 2002).

There are four primary behavioural components associated with transformational leadership including: idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration (Bass 1985). The more leaders adopt these components the greater the transformative impact on their followers. *Idealised influence* refers to the admiration, respect, and trust that followers have for their leader. The transformational leader is a role model who has high moral and ethical standards. *Inspirational motivation* occurs when a transformational leader motivates his or her followers by providing them with meaning and challenge in their work. By inspiring teamwork and vision among followers, the transformational leader encourages greater enthusiasm in their efforts. *Intellectual stimulation* is spurred by transformational leaders when they encourage creativity and new ways of thinking about problems, and include followers in decision-making processes. Attending to followers' needs for personal growth is a demonstration of how transformational leaders demonstrate *individualised consideration*. The transformational leader interacts with each individual as a whole person, recognises individual needs, and remembers important information about each person.

Although Bass' (1985) conceptualisation of transformational leadership in a business setting is the most frequently adopted framework, transformational leadership has been conceptualised in other ways. For example, Podsakoff *et al*. (1990) identified six transformational factors that stem from a managerial leadership standpoint – articulating a vision, providing an appropriate role model, fostering acceptance of group goals, high performance expectations, individualised consideration, and intellectual stimulation – and one transactional factor, contingent reward. Yet another conceptualisation was provided by Rafferty and Griffin (2004) while examining the employer–employee relationship. They proposed five sub-dimensions of transformational leadership: vision, inspirational communication, intellectual stimulation, supportive leadership, and personal recognition. These findings indicate a level of variability in how transformational leadership is conceptualised and that components of transformational leadership may vary by context.

While various researchers (e.g. Charbonneau *et al.* 2001, Rowold 2006, Callow *et al*. 2009, Vella *et al.* 2012, Smith *et al*. 2013) have contributed greatly to our understanding of transformational leadership in sport, two issues related to measurement and thus conceptualisation of the construct are worth noting. First, the characterisation of transformational leadership is largely based on business leadership models (Bass 1985). Second, the self-report instruments used to assess transformational leadership in coaches have been culled from measurements also based in business leadership and adapted for sport. For instance, the differentiated transformational leadership inventory (DTLI, Callow *et al.* 2009), as well as the DTLI for youth sport (Vella *et al.* 2012) have been utilised in sport as measures of transformational leadership. However, these scales were constructed using items borrowed from the multidimensional leadership questionnaire (Bass and Avolio 2000) and the transformational leadership inventory (Podsakoff *et al.* 1990), measures created in the business domain. Because the origin of these measures was grounded in business and industry settings, important elements of transformational leadership for sport may have been overlooked. For example, coaches and athletes may interact

differently than in leader–follower relationships in business due to the differences in physical proximity and variations in motivation (Rynes *et al.* 2004).

Despite ongoing progress in research on transformational leadership, a significant gap exists. Researchers have yet to qualitatively explore the key attributes of transformational leadership from the perspective of those who coaches are expected to 'transform' – the athlete. Recognising athletes' perspectives is a major part of deepening our understanding of what constitutes transformational leadership in sport. It is essential that voices of athletes inform the foundation of this conceptualisation because their perception is of preeminent importance. Researchers measure transformation by changes in the athlete that are often not readily observable (e.g. alteration in motivational perspective, altruism). We acknowledge that there are multiple perspectives from which an understanding of transformational leadership can be developed. One benefit of examining this construct from the perspective of athletes (rather than coaches) is that we can limit potential biases or inflated self-perceptions that the coach may hold, reflecting more positive outcomes than are actually perceived by the athlete. Another part of the existing gap is the lack of qualitative research. Qualitative perspectives are often valuable because they provide a depth of understanding from the participants' perspective and have the potential to add to theoretical underpinnings of constructs (Pope *et al.* 2000, Wimpenny and Gass 2000). Therefore, the current study is an important step toward developing a better conceptual understanding of transformational leadership in sport. Given the positive outcomes associated with transformational leadership and the limited research examining how transformational leadership is enacted within sport, the purpose of this study was to provide an initial exploration of the meaning of transformational leadership as perceived by female team sport athletes in the mountain west region of the United States of America.

Method

Paradigm

In the present study, we assumed a relativist ontology in which '… multiple, constructed and mind-dependent realities …' exist (Sparkes and Smith 2009, p. 493). Lincoln *et al*. (2013) suggest that appropriate methods aligning with a relativist ontology may include interviews based on participants' reconstructed experiences of past events and the researchers' subsequent interpretations of participants' experiences. Therefore, our analysis and findings reflect an interpretive understanding of the construct of transformational leadership gained through interactions with participants, which is recognised as the crucial means of knowing (Lincoln *et al*. 2013).

Participants and procedures

Eleven female athletes (ages 18–22) who participated in softball ($n = 4$), volleyball ($n = 1$), and basketball ($n = 6$) were recruited from three colleges – a community college, a NAIA college, and a Division I University – in the Mountain West region of the United States. Selection criteria for participation included being female and currently competing at the college level. Only female athletes were recruited based on research suggesting differences between genders in preferred coaching style, indicating that female athletes prefer more participative styles of coaching (Chelladurai and Arnott 1985). Further, it is important to recognise the gender dynamics that exist

Table 2.1. Participants' background information.

Athlete pseudonym	Sport	Year in school	Current school division	Highest level of competition	Level(s) of coaches discussed
Stephanie	Softball	Sophomore	NCAA Division I	NCAA Division I	Club
Hailey	Softball	Sophomore	NJCAA	NJCAA	High school, College
Courtney	Softball	Sophomore	NCAA Division I	NCAA Division I	High school
Danielle	Softball	Freshman	NJCAA	NJCAA	High school, College
Michelle	Volleyball	Senior	NAIA	NAIA	College
Cady	Basketball	Sophomore	NJCAA	NCAA Division II	Club, High school, College
Erin	Basketball	Senior	NCAA Division I	NCAA Division I	Club
Jamie	Basketball	Senior	NCAA Division I	NCAA Division I	High school, College
Jill	Basketball	Red-shirt junior	NCAA Division I	International	High school, College, International
Shannon	Basketball	Senior	NAIA	NCAA Division I	Club, High school, College
Jenny	Basketball	Senior	NAIA	NAIA	College

between interviewee and interviewer, suggesting complications in qualitative interviewing between opposite genders (Gurney 1985, Poulton 2012). Following institutional ethics board approval, participant recruitment began and continued until data saturation occurred (Guest *et al.* 2006). Teams were contacted through emails to coaches and interview times were set up via email or text messages with athletes. Interviews were conducted in locations that would ensure the comfort and convenience of the participants. Demographics are provided (Table 1) in order to situate each participant within her context and allow the reader greater understanding of participants' backgrounds.

Interviews and interview guide

Following informed consent procedures, interviews were recorded and transcribed verbatim. In order to encourage candid responses, participants were informed that they could withdraw from the study at any time and their responses would be anonymous. Audio recordings lasted between 25 and 50 min. In this study a semi-structured interview guide was used to ask athletes about their interactions with influential coaches. Rather than soliciting the perspectives of coaches, the voices of athletes were sought, given that athletes' perceptions of their coaches' behaviours seem to be a key factor in the creation of athletes' reality. The interview guide was based on Bass' framework of transformational leadership. The notion of transformational leadership was not explicitly mentioned to the participants, given the researchers' interest in understanding athletes' conceptualisations of influential leadership without imposing pre-existing definitions or constructs. Questions were

designed to tap into sport transformational leadership generally, allowing participants to describe the phenomenon in their own ways. Effort was made to adopt descriptive words used by Bass in the description of his transformational leadership components (Bass 1985, Bass and Riggio 2006) while at the same time conversing with each athlete using terms and colloquialisms germane to sport. In this manner, questions were designed that enabled inquiry into the presence of specific transformational behaviours of current and former coaches and how the athlete experienced those behaviours. Questions were pilot tested with two former female basketball players from NCAA Division I and III levels of competition. Interview guide questions were reworded and refined to ensure clarity (Table 2). For example, the original question 'how did your coach create meaning for you?' was modified to 'how did the coach communicate that participation in your sport was meaningful?'

Table 2.2 Interview guide.

Can you tell me about how your coaches influenced your life in a positive way?
Can you tell me about how your interactions with your coaches throughout your career made you a better person?
Sometimes teams perform above and beyond the expectations of others. Can you think of a time when this happened for a team you were on?
And how did the coach facilitate that happening?
Individualised consideration
Did you feel valued by your coach off the field/court? How do you know you were valued as a person?
Did your coach understand that each player needs different coaching?
Did your coaches treat everyone the same regardless of how much you played and contributed in games? How do you know this?
Can you think of a time when a coach spent extra time helping you develop a skill or helped you off the field/court?
Intellectual stimulation
Can you think of an experience where your coaches challenged you or your team to solve a problem?
In what ways have your coaches built trust in you?
How did coaches give criticism or feedback to you or your teammates?
In what ways did your coach communicate to you that what you were doing as an athlete was meaningful or important?
Idealised influence
Did you feel like your coach had good character? How do you know?
Can you tell me about an experience where your coach's actions off the court/field influenced you?
Many people trust their coaches a great deal on the court. How was trust created?
Inspirational motivation
How did your coaches motivate you?
Can you tell me about an experience when your coach motivated/inspired your performance?
In what ways did your coaches provide a goal/vision for your team?
Do you have any other comments to add about how your coaches have impacted you positively?

The semi-structured interviews explored the overarching question, 'Can you tell me about the coaches that have had a positive impact on your life?' The interviewer used probing follow-up questions such as, 'What do you mean by …?' or 'Can you tell me more about that?' to get more detail or clarification from the athletes' statements (Patton 1987). Given our a priori interest in finding out about coaches who positively influenced their athletes, the questions were geared towards eliciting understanding of coaches who facilitated athletes in their endeavours. In this study, a coach was viewed as transformational if the athlete was influenced positively by her coach. However, the parameters of a transformational leader were not explained to participants in order to avoid tainting participants' perspectives by existing frameworks. Because having a positive influence is central to transformational leadership, eliciting details related to the context and circumstances of those various interactions was likely to result in references to the components of transformational leadership. In addition, it was expected that the components of transformational leadership would manifest in ways unique to the sport domain. Based on the nature of interactions in highly interdependent, competitive sport atmospheres, it was also possible that additional themes would emerge.

By design, participants were not given a specific level of competition or coach to focus on. Therefore, athletes talked about coaches at a variety of levels, and many of them talked about more than one coach during the interview. Collectively, athletes referred to both male and female coaches, four travel team coaches, seven high school coaches, two former college coaches, and eight current collegiate coaches.

Data analysis

For this study, inductive and deductive strategies were employed (Strachan *et al.* 2011). As outlined by Thomas (2006), an inductive approach was initially employed to analyse the transcript data. Specifically, inductive analyses proceeded by grouping meaning units into general and higher-order themes. For example, statements made by participants that were similar in nature – 'got to know us outside of volleyball,' 'have a relationship outside of sports,' and 'getting to know us off the field' – were grouped into general themes, such as 'caring about the person,' and then grouped into higher-order themes that shared meaning. In this example, the general theme 'caring about the person' was grouped under the higher-order theme named 'caring'. A meaning unit was defined as 'a segment of text that is comprehensible by itself and contains one idea, episode or piece of information' (Tesch 1990, p. 116). These meaning units were not coded according to a priori themes during the inductive phase of analysis. Rather, as themes developed based on the data, the researchers used deduction to compare themes to emerging components of transformational leadership. Specifically, once higher-order themes had been established, transcripts were again reviewed for specific meaning units that were reflective of the general categories previously established. These meaning units were then placed under higher-order themes (i.e. deductive analysis).

Analysis procedures were adopted based on recommendations from Thomas (2006) and Creswell and Miller (2000). A total of 106 single spaced pages of interview transcripts were coded by the interviewer and two peer researchers in a four step process. First, all three researchers read the interviews multiple times in order to ascertain the individual and collective experience of the participants. Second, each researcher separately extracted meaningful statements that illustrated the impact of a

coach on the athletes' lives, subsequently referred to as meaning units. Third, the primary researcher compiled these statements into a single electronic document, which consisted of 226 meaning units. The pages of text were printed and the meaning units were cut into individual pieces of paper. Lastly, the three researchers met and categorised the meaning units into themes based on their similarity and named the themes. Any disagreements were discussed until consensus was reached.

Trustworthiness

Rather than adopting an a priori *list* of trustworthiness criteria, we employed several trustworthiness procedures that appeared relevant to the current investigation and which are consistent with steps adopted by other contemporary sport and physical activity researchers (e.g. Evans and Crust 2015, Sparkes and Smith 2014, Wilson *et al.* 2015). These included the development of rapport building, use of reflexive journaling, data saturation, critical friends, and member checks. In adopting these traditional trustworthiness measures, we do not assume or imply that such strategies have led us to an accurate truth, but hopefully to a more fair, ethical, and respectful interpretation of participants' viewpoints and recall of their experiences (Sparkes and Smith 2009, 2014, Liechty *et al*. 2014).

In this study, the past experiences of the interviewer (i.e. first author) as a high school athlete and coach emerged as beneficial tools in building rapport and conversing in common sports vernacular that participants were familiar with. For example, in sharing her experiences playing summer softball tournaments with one of the softball players, the interviewer was able to converse with the participant using softball jargon. In doing so, the conversation appeared to flow more easily and smoothly. Numerous other instances (e.g. a participant crying as she relayed an experience in which a coach comforted her following a significant loss) indicated that participants felt comfortable expressing their emotions and describing their experiences to the interviewer. The use of a self-reflexive journal was also employed given that the interviewer's status as a sport insider – one with numerous experiences as an athlete, coach, and researcher – inevitably impacted her interaction with and analysis of participant statements and experiences (Morrow 2005). By recording her experiences, reactions and emerging awareness of any assumptions or biases that came to the fore, the interviewer was better able to 'inspect' the ways in which her experiences and beliefs as an athlete, coach and researcher might influence the interpretation of or relative importance given to particular participant statements and/or experiences (Ortlipp 2008). Furthermore, interviews continued until such time as little novel information appeared to be forthcoming, that is, until data saturation was evident (Morrow 2005).

Since, as mentioned, the interviewer was a former athlete and coach, it seemed worthwhile to employ the use critical friends and member checks. With regard to critical friends, ongoing discussion between the first, fourth, and fifth authors, enabled an honest, open, and rigorous dialogue about the core meaning of themes and the further delineation of characteristics of the major themes. One particular instance is provided as an example. During the categorisation of meaning units, the fourth and fifth authors acted as critical friends by suggesting that perhaps the first author was especially attentive to identifying caring in the experiences of the participants based on her past research focused on caring. The vocalisation of this concern allowed all three authors to recognise and become especially attentive to

any predisposed notions they may have carried with them in interpreting and making sense of participant statements and recollection of their experiences. By considering potential predispositions to extract meaning based on their individual research interests and backgrounds, the authors provided a space for pre-existing viewpoints and beliefs to be explored in relation to the emergence and categorisation of transformational leadership themes.

Finally member checks were performed in two ways. First participants were emailed and asked to read their transcribed interviews to determine if the transcripts were consistent with their words, perspectives and information as conveyed during the interviews. Several participants suggested that the transcripts were congruent with their recollection of the information relayed during the interview process and no suggested changes were offered. Checks were also made after researchers had developed themes by sending the results section to each participant via email and requesting feedback. Although only 4 of the 11 participants provided feedback on emergent themes, the positive nature of their comments (e.g. 'I agreed with the findings', 'what I read looked great') and the fact that no changes were suggested, could be said to provide some indication that our development of themes was a potentially fair and respectful representation of participants' interpretation of their own experiences.

Findings

Four major themes were developed by the researchers from the interview data: *caring, motivating, teaching life lessons,* and *trusting.* Major themes were identified by at least 10 meaning units associated with a topic and by a large majority (80% or more) of the participants emphasising the importance of that topic (Guest *et al.* 2006). Additionally, themes that were considered relevant to the issue at hand or which appeared particularly salient for the participants were included in the results. Using pseudonyms for the participants, these themes are discussed below.

Caring

The most prominent theme that emerged from the interviews was caring. In fact, caring seemed infused in all of the themes. All participants explained that coaches who cared about them on and off the court made a positive impact on their lives. Caring was characterised by the athletes in three ways – investing time and energy into athletes, feeling cared for as an individual, and feeling their coach was loyal and supportive. First, coaches invested time and energy in their athletes. Investment was most often evident by the significant amounts of extra time coaches spent with the athlete, in particular, by helping athletes with skill development outside of regular practice hours, holding team dinners, scheduling outside activities with individual players, and coming to watch participants play even after the athlete had progressed to another team. In many instances coaches invested time and energy beyond their regular responsibilities as coaches. From the participants' perspectives, the extra time was evidence that coaches cared for them.

Frequently, athletes explained that coaches spent extra time with them to help develop skills. For example, Jamie, a basketball player, explained that her high school coach opened the gym for her during the summers to practice and also got up early in the winters to open the gym for her before school started.

> I would show up at six most mornings and he would get up early and make sure I could get over there and [he] would set everything up. So that's a huge deal. Did he stand there and give me a whole lot of knowledge that I didn't know? No. But just waking up every day and being willing to let me in there and take time out of his life was a big deal.

While skill development outside of regular practice time is not unusual, the participants in this study also described instances where coaches went beyond their regular coaching responsibilities. For Jamie, opening the gym early in the mornings was an indication that her coach cared about her.

In some instances, coaches also went beyond regular responsibilities by investing time in their players when the investment was unrelated to their sport. For example, Michelle in referring to her college coaches explained, '[They] took time to come and figure out more about my family and where I'm coming from, and we've had a lot of really good talks when I was struggling with a bunch of things'. Jenny's college basketball coach 'came out and played tennis with [her]' during the off season just for fun. For these players the extra time coaches invested in their players demonstrated caring.

The second way in which participants characterised caring was that they felt they were valued as individuals, and not solely for their athletic abilities. Participants could tell that their coaches cared about them as a person because the coaches wanted to get to know them. Coaches asked about their families, interests, school, and other outside activities. For example, Cady explained that she understood that at a college level 'their [coaches] job is to win, and coaches that really care – they value you – value your opinion and you as a person'.

Getting to know the players' families was another way coaches showed that they cared about their players. Many participants said the coach knew their family members by name and asked about them frequently. Some athletes also knew the family of the coach and seemed to feel that because the coach was willing to share a significant part of his life with his athletes, the value of their relationship increased. For example, Jill said,

> [Coach] has meetings with us all the time … just the other day [we] had a meeting and I think we talked about basketball for like 30 seconds. And then it was just like talking about what's going on in our lives and he's not afraid to tell us what's going on in his life. He's a pretty open book. A lot of coaches are very reserved in telling people, their players, about their lives, which is totally fine if that's how you choose to be. But with him I think it brings a more … almost friendly relationship … With [Coach], I just feel like we have such a good relationship and I know his family. I know his wife and his kids. I know his mother and father-in-law. And our whole team is like that. We're very close with him and his whole family.

Several participants mentioned coach–player meetings as important occasions in which coaches expressed interest in them as individuals and in their lives beyond sport. In addition to Jill's experience above, Shannon's interactions with her coach in individual meetings were evidence of her coach's caring. She said, 'She cares about her players a ton. [She] jokes with us, sits us down, we have meetings. We've probably had three meetings this season where we just sit and talk, and it's not forced. She really cares about you'.

The third way that athletes characterised caring in this study was by the loyalty and support of their coaches. One way these athletes felt valued was when their coaches demonstrated consistent support. For example, Shannon explained that when

she played poorly, her college coach '[took her] aside after the game and said, "That was a crappy game for you, but we're going to move past it. I'm sorry you had a bad game, but I still believe in you and your abilities"'. For Shannon this was evidence that no matter how she performed during a game she had the support of her coach.

Jenny related an experience that demonstrated the loyalty of her coach. When Jenny needed to transfer schools, her current coach was eager to have her on the team. While sharing this experience in the interview Jenny explained, '[Coach said], "We're going to get you here no matter what. I'm going to talk to the athletic director. We're going to scrounge some money". So she made it work'. To make the point that it was a characteristic of the coach and not just a single incident, Jenny shared another time when her coach was loyal to a different player. 'One girl on our team … tried to get her red-shirt [year] back and she didn't and so they brought her on the coaching staff and they still want her. They really care about her'. Jenny explained that her coaches were loyal because they made extra efforts to help a former member of the team without any obligation to do so.

Additionally, verbal expressions of caring were powerful ways the athletes knew the coaches cared for them. For example, Shannon said that her coach 'was probably the only coach that verbally would just say, "I care about you. I love you. You mean a lot to me". And she's a special person for doing that'. While participants indicated that their coaches verbally expressed a sense of caring, these expressions of caring were supported by actions and were, therefore, authentic and meaningful to the athletes. In sum, for the participants in this study, the theme of caring was characterised in three primary ways: coaches' investing time and energy in their athletes, athletes feeling valued by their coaches beyond sport, and coaches demonstrating loyalty and support.

Motivating

A majority of the athletes in this study felt that their coach had a positive impact on them by pushing, or motivating them. Athletes described experiences where their coaches pushed them beyond what they would normally do. In this case, the term 'pushing' refers to a motivational drive that coaches instilled or nourished in their athletes. Several participants used the specific phrase 'pushed me' to describe the motivating feeling their coaches inspired in them.

There were three common ways in which coaches motivated their athletes. First, coaches challenged their athletes physically, either through conditioning or skill development. Jill explained, '[He would] make me work harder than I thought I could work; make me push through being tired and figure out what being really tired is [laughs]. There's always that little bit extra that you can go'. Erin shared a similar experience:

> There were times when I was just like, 'She is ruthless!' which I think is a good thing. There would always be practices where she would just run us really hard. In preparation for tournaments, we'd have conditioning days at [the park] where she would just make us run laps around the park and hills … It was intense!

Both Erin and Jill acknowledged that they exceeded their expectations because the coach pushed them to a higher level of physical conditioning. In both of these instances, the athletes appreciated the difficult conditioning their coaches required of them.

The second way in which athletes described feeling their coach motivated them was by mentally pushing them. Players often felt motivated by their coaches' criticism, encouragement, and challenges. For example, Jenny said, 'I was really undersized, but she was always giving me critical advice … She always knew that's the way she should talk to me to get the most out of me'. Cady shared how her coach also knew how to motivate her to do better – by telling her she could not do something well. She said,

> When [my coach] says, 'You can't shoot the three. Maybe just take a step in', that sets me off and I'll spend 3 hours a day in the gym practicing threes just to prove them wrong. So I feel like sometimes [my coaches] know that and they use that against me because they know that it motivates me and that's something that [my coaches] have learned about me.

Cady was motivated to practice more based on the challenge from her coach. This method of motivation was very individual and relied on the degree to which the coach knew her players. Cady acknowledged that this was something her coaches learned about her as they spent time getting to know her. Several other players recognised that their coaches knew them well enough to adapt their coaching behaviours to elicit specific responses from their players. Knowing individual players well suggests the theme of caring is present here as well.

Finally, athletes in this study felt their coaches motivated them by having high expectations of the athletes. By communicating high expectations to their athletes, coaches motivated their athletes to higher levels of performance. Hailey said, '[Coach] will push you especially if she knows how talented you are,' and of a different coach she said, '[Coach] expected so much from me'.

Some of these influential coaches communicated their high expectations by tapping into and sharing the belief they had of their athletes' potential. Jill shared the following experience:

> For me the most motivating thing was when a coach has told me that I have greater potential than I think. Or that I can do better than I think that I can do … When I went [to compete with my national team] they wanted me to play a guard-forward position. When I went there [coach] was like, 'Jill, you can shoot whenever you want. You have the green light. Shoot the ball whenever you want …' And that really made me think, 'Okay, I don't just have to stick with what I've been doing. It's time to expand my skill set'.

Sometimes these expectations were difficult for the athletes to adjust to. Michelle explained that her coach expected everyone on their volleyball team to communicate well and loudly on the court. This was challenging for Michelle because she was initially very shy and quiet. However, as Michelle worked to meet this expectation she felt personal growth on and off the court.

For the participants in this study, the theme of motivating was characterised by coaches pushing the athletes physically and mentally, and having high expectations of them. The participants recognised that these coaches envisioned a higher level of performance for them and motivated them to achieve more.

Teaching life lessons

Interview comments revealed that coaches impacted the participants in positive ways by teaching life lessons along with their sport. A vast majority of the athletes talked about life lessons. These life lessons ranged from encouraging hard work to being

grateful. Coaches taught these lessons both explicitly and implicitly – by their words and their actions. Stephanie said her coach inspired them by his personal life story. She commented:

> He grew up in a rough background and he lived in a trailer park. His parent's died so he lived with his grandma. And we knew that he came from nothing and now he's a really successful guy and he taught us to never give up because you can do whatever you want.

She also explained that while he was a teacher of softball skills he also taught about how to succeed in life.

> Along with the lessons he taught me on the field, he taught me that you can bring them to your life as well. For example, to respect him … if you show up late, that's rude to him because he is putting in all his time and you're not going to do that to your boss.

Stephanie's coach taught her by his example and by using his life experiences. Jill's coach took the opportunity to teach through her own experiences. When Jill and her teammates skipped class one day, the coach used it as a learning experience. She explained:

> He just said, 'You guys are the leaders of this team … I want you guys to think of what is a deserving punishment for you guys'. We had to sit and think what should we do? So we came up with something … But just little things like that. He wasn't mad. He didn't yell at us. He didn't do anything like that, but he [said], 'You know, girls, I just think you're so much better than this'. And we were like, 'You know what? You're right. We are better than this'. So he just kind of made you think.

The coach seemed to use the players' choices as an instructive opportunity to help them learn about accountability for their actions.

The athletes in this study also saw their coaches living their lives in ways that taught athletes beyond the sports environment. For example, Danielle's coach invested a lot of time taking her players to elementary schools to do assemblies to volunteer with a non-profit organisation. Danielle was impressed with her coach's positive attitude as she interacted with all the young children.

Athletes also learned to have the proper perspective on sports and life. Two different players explained that their coaches put sports into perspective. Erin said that her coach tried to emphasise that their 'whole lives weren't going to be about basketball'. Cady related an experience where her coach let her know that there was more to life than just playing basketball. She said that after a big loss …

> as soon as the game ended, I remember I went to the locker room and I grabbed my shoes, changed my jersey and I went to the other gym, and I just started running, and running, picked up balls and just dribbling and shooting … [With emotion] my coach came in and he grabbed the ball and he was like, '[Cady], stop'. And he just grabbed me and he just hugged me and was like, 'It's okay. It's okay. It doesn't matter. It was just a game. You work your butt off every day. It's going to be alright'. [He made] you feel so much more like basketball – I love basketball, and it's a huge part of my life, but it's not the only thing. He was really good at [explaining that] just because we've lost this game doesn't mean you can't succeed the next game or you can't succeed on your test tomorrow. It doesn't change anything. You can still make a difference in other places. That was really, really helpful to me.

Both Erin and Cady seemed to gain perspective on life through their experiences with their coaches. Their coaches taught them that sports were not the most important part of life.

Erin's coach taught her about being grateful. They were required to bring a 'grateful list' to practice each week. Their coach made it clear that the grateful list was not optional. Erin said, 'You'd show up to practice and if you didn't have it just leave. She was not messing around'. While Erin's coach was teaching a lesson about being thankful, she implicitly taught a lesson about being accountable as well. These impactful coaches taught life lessons such as working hard, never giving up, having perspective, being grateful, and being accountable. It was clear that these coaches made an effort to teach about life in their role as sports coaches.

Trusting

A final theme that emerged in these interviews was trusting. Building trust between coaches and players seemed to be an important issue for the athletes. According to participants, trust existed bi-directionally: the coaches who had a positive impact on their athletes trusted their players and had the trust of their players.

Players trusted their coaches the most when they felt the coach cared about them and wanted to help them. During the interview Cady said about one of her coaches, 'It's easy to trust somebody that isn't out for their own gain or their own benefit'. When asked how she knew the coach wasn't out for her own benefit, she responded:

> It's never about her. It's never about how is it going to help [the coach]. How we talked in practice, and how she would help get my name out to coaches, or colleges … It was like, [Cady], I want to help you. I want to make you better. So she kind of put all the focus on me.

Trusting that the coach was doing the best thing for the team was also an important theme. After sharing an experience where the coach made her sit out of a game, Cady explained how she finally learned to trust her coach.

> I just learned a huge lesson that just because I may not understand what they're doing or what their decision is, I have to trust it. If you already have that relationship that you know that they're doing it for the good of the team or to win or something to help in the long run – even if that might mean a loss – if it's going to have a better influence in the long run, that's huge. She was one of my favourite coaches of all time now. I respect and trust her so much. I know she would do anything to help me be successful and to make this program successful. So sometimes it might take conflict or tough things like that to understand your coach or your players. But just building trust or building a relationship that will be beneficial towards the program.

One method some coaches used to engender trust was to relinquish leadership. Jill explained that her coach let the returning players be in charge during familiar drills in practice, stopping to teach certain parts of the game to team members who were new. Allowing players to take a larger role communicated to the athletes that their coach trusted them. Jamie succinctly stated, 'Sometimes it's not all about the coach having to be a part of it'.

The foundation for trust was the personal relationship between the coach and the athlete. Knowing the coach cared was woven throughout their comments and transcended the meaning units that directly indicated caring. For example, while talking about building trust with her coach, it was apparent that Jenny felt that their relationship extended beyond sports. She said:

> Gosh, I would probably go to my head coach with any problem in my life. I feel like she has lived a good life and has had a lot of experience. It was the same with [my assistant coach]. They are both very approachable, and I think just [with] time comes that trust … if you're having a problem, you could definitely go to them … They really do care about you and so of course, there's that trust that comes with time.

Jenny's comment also illustrates the complex process of building trust. She highlights that caring is a pre-requisite to building trust. As athletes felt cared for they were able to build trust.

In summary, athletes in this study felt that coaches influenced them positively by caring, motivating, teaching life lessons and trusting. The following quote from Cady encapsulates the positive impact of these coaches.

> A coach can have such an effect on [athletes] outside of basketball or outside of sports. They can change the way [athletes] live their lives – their lifestyle, their working out, their eating, or the way you are in your community or the way you are in your work ethic. The more the coach walks the walk or talks the talk, the more you want to be like that and the more they preach about it or talk about it, and they try to incorporate those things, it's going to change your life. I wouldn't be the same without basketball. I wouldn't be the same. The highs and the lows, and the bus trips, the countless pairs of shoes, and everything the coach provides for you, is a life-changing experience, and they can do so much good … so much positive in your life.

Discussion

This study explored the ways in which coaches' transformational leadership influenced athletes in positive ways. In the current study, coaches positively impacted their athletes in four major ways – by *Caring*, by *Motivating*, by *Teaching Life Lessons*, and by *Trusting*. Our purpose was not to redefine transformational leadership, but to explore the degree to which current frameworks of transformational leadership were also applicable to the sport context and explore possible important coach behaviours that have been overlooked. Based on the emergence of and support for these themes, we will examine the similarities and differences between these four themes and existing frameworks of transformational leadership. A plethora of original studies connect Bass' framework of transformational leadership to positive performance outcomes (Lowe *et al.* 1996) and demonstrate the efficacy of his transformational leadership components (Bass 1985, Bass and Riggio 2006). Therefore, Bass' components will be the primary focus, with secondary consideration provided to the contributions of Podsakoff *et al*. (1990) and Rafferty and Griffin (2004).

Comparisons to transformational leadership

Individualised consideration

Behavioural manifestations of individualised consideration were evident in athlete perceptions of being cared for by coaches. Avolio and Bass (1995) explained that individualised consideration is accounting for the needs of followers and recognising individual differences, acknowledging the followers' desires to achieve, and providing ways in which followers feel empowered. Podsakoff *et al*. (1990) also include a similar concept in their framework which they term providing individualised support. At the core of the experiences shared by athletes in this study was the perception that these coaches influenced them in a positive way by caring for them.

This was evident from the relationships coaches built with their athletes and the effort they invested to get to know them as individuals. When coaches asked about family and life outside of their sport it was interpreted as evidence of caring. The athletes noted an authenticity to their coach's interest in their lives. The findings of this study suggest that the basis of individualised consideration or providing individualised support in sport is demonstrating caring behaviours and the development of personal relationships.

Caring was woven into participants' statements throughout the interviews. While caring is similar to individualised consideration, in the current study it was of preeminent importance. This similarity coincides with the work of Avolio and Bass (1995) who suggested that individualised consideration was the linchpin that elevates typical leadership behaviours to transformational behaviours (Avolio and Bass 1995). The notion of caring in transformational leadership also coincides with research on the coach–athlete relationship. Specifically, Poczwardowski *et al*. (2002) qualitatively investigated interactions between coaches and athletes and found that mutual caring was an important recurring pattern. In interviews with Olympic athletes, Jowett and Cockerill (2003) concluded that interactions among coaches and athletes influence both skill development and personal development. In addition, they suggest that the relationships between coaches and athletes are underlined by care, concern, and support. While the idea of building caring relationships is not novel in sport research, it has not been emphasised in conjunction with transformational leadership. As a coach builds a personal relationship with players and knows them individually, he/she builds a foundation upon which the effectiveness of every other leadership and coaching strategy appears to rest. This insight enriches our understanding of the importance of caring behaviours as a significant part of individualised consideration.

Inspirational motivation

Elements of Bass' (1985) inspirational motivation component, Podsakoff *et al*.'s (1990) high performance expectations category, and Rafferty and Griffin's (2004) inspirational communication factor were evident in the theme *Motivating*. Transformational coaches continually challenged their athletes to do more than they thought possible. Enthusiasm was stimulated by the coaches encouraging the athletes to improve their athletic skillset. These ideas are consistent with Bass (1985) and Northouse (2013), who both view having high expectations as central to inspirational motivation. Interestingly, the athletes did not mention the use of inspirational language or speeches. Previous descriptions of inspirational motivation suggested emotion-laden talks and inspirational communication were a significant piece of transformational leaders' behaviours (Rafferty and Griffin 2004). Chelladurai (2007) also identified inspirational communication as a behaviour that is essential to the pursuit of excellence in sport. The lack of motivational speeches as a part of athletes' descriptions of their coaches, suggests a departure from previous conceptualisations of transformational leadership. It may be that the inspiring language so often associated with transformational leaders may have a very transient effect on athletes, not something readily recalled as continually influential in their interactions. On the other hand, we must consider the possibility that the content of the interviews did not reflect the full spectrum of behaviours that encompass inspirational communication. However, for the athletes in this study, the daily imperative for improvement

and hard work was inspirational, suggesting that the presence of clearly communicated high expectations was a factor in motivating athletes.

Distinct from previous conceptualisations of transformational leadership in other domains, athletes in this study focused on the extent to which coaches physically and mentally motivated them. Coaches held the athletes to a high standard of physical conditioning, demonstrating the high expectations they had for their athletes. The relevance of this theme may be unique to settings where fitness and conditioning are central to optimal performance. Sport and the military are two contexts where this seems most applicable. While mentally challenging subordinates may be common in many fields it could be argued that the tenor of that encouragement is more direct, and in a way, more transactional in athletic and military settings. Interestingly, researchers have not identified or explored this aspect of transformational leadership in the military. Thus, the physical and mental demands placed on athletes make this theme distinct from previous conceptualisations of transformational leadership. It is worth noting that most coaches (transformational or not) facilitate challenging physical conditioning drills for their athletes and expect them to work hard. This is not unique to transformational coaches. Nevertheless, it is important to include the idea of being physically challenged because it reflects the notion that coaches held athletes to high standards, an important component of Podsakoff *et al*.'s (1990) model. We also recognise that pushing athletes physically may be considered a transactional behaviour. While important, on its own pushing athletes physically is insufficient to produce the higher levels of performance sought by transformational leaders. Additionally, coaches in this study mentally challenged their athletes by critiquing their performance and challenging them to push their limits. Flett *et al*. (2013) interviewed coaches who were considered effective and ineffective in facilitating positive youth development. Both ineffective and effective coaches challenged the athletes physically and mentally. However, it was clear that effective coaches implemented *tough love*, wherein they criticised performance and pushed athletes physically, having previously established solid, caring relationships. Similar to the effective coaches in Flett *et al.*'s (2013) study, coaches in the current study established relationships with their athletes that allowed them to challenge, motivate, and demand extra effort in a manner that may seem hostile or negative to the outside observer. In previous conceptualisations of transformational leadership, the physical and mental demands placed on athletes had not been addressed. Further examination of this phenomenon is warranted to establish this theme as a distinct characteristic of transformational coaches.

Idealised influence

In this study, *Teaching Life Lessons*, relates to Bass' (1985) idea of idealised influence, Podsakoff *et al.*'s (1990) conceptualisation of providing an appropriate role model, and Rafferty and Griffin's (2004) supportive leadership component, in that each framework refers to a relational element and the vicarious influence of transformational leaders. Leaders act as role models (Bass and Steidlmeier 1999) and their followers admire, respect, and want to emulate them (Bass and Riggio 2006). For the participants, coaches were very influential. This influential nature was due, in large part, to the mentoring provided by the coaches and the life lessons they shared with their athletes (Miller *et al.* 2002, Gould and Carson 2010).

Idealised influence includes providing a clear and inspirational vision for the followers and the organisation (Berson *et al.* 2001). Articulating a vision appears prominently in Podsakoff *et al*.'s (1990) and Rafferty and Griffin's (2004) views of transformational leadership although they both de-emphasise the visionary aspect of the concept. For these female athletes, coaches' visions for their teams were not explicitly important for influential leadership. Perhaps the role of the coach in providing a clear vision for his or her team was not explicitly addressed by the participants because it is inherently expected that the role of the coach is to direct his or her players toward winning.

Another major theme in the current study was *trusting*. As conceptualised by Bass and Riggo (2006), idealised influence includes the notion of trust. Although not included as a component in Podsakoff *et al*.'s (1990) model of transformational leadership, having trust in leaders was a mediator in the relationship between leadership and followers' performing beyond expectations (Podsakoff *et al.* 1990). Trust is also the means by which leaders create acceptance of the vision and goals for the organisation (Bennis and Nanus 1985). The current study provides additional support for the importance of building trust between coaches and athletes.

Participants also emphasised the importance of bidirectional trust. It was important to the athletes that they trusted their coach and that their coach trusted them. Perhaps as the athletes felt trusted by their coaches they experienced a feeling of empowerment. Previous research has indicated that transformational leaders empower their followers and charge them with greater responsibilities (Kark *et al.* 2003). Athletes in this study relished being the recipients of their coach's trust. While it is clear from previous business leadership literature that trust is an essential part of the leader-follower relationship (Podsakoff *et al*. 1990), *bi-directional* trust has not been examined in previous sport leadership research nor emphasised in the transformational leadership literature. Previous leadership research focuses on the importance of followers trusting their leaders (Dirks and Ferrin 2002). The unique element added by this study is that the coaches who had the most influence on their athletes also demonstrated trust in their athletes. Additionally, this study adds to the knowledge base regarding the importance of trust as an integral part of the idealised influence component of transformational leadership. Future research should attempt to examine further the concept of bi-directional trust in sport.

Intellectual stimulation

The concept of intellectual stimulation includes leaders who encourage followers to work through problems in new and creative ways (Bass and Riggio 2006). Bass (1985), Podsakoff *et al*. (1990), and Rafferty and Griffin (2004) all suggest this notion to be a key component of transformational leadership. While intellectual stimulation did not appear consistently in any of the themes in this study, it was tangentially addressed. For example, one athlete in this study alluded to her coach's suggestion that she should reflect on her actions and determine an appropriate punishment for skipping class. Perhaps one way coaches demonstrate intellectual stimulation is through encouraging the development of moral reasoning. Additionally, some athletes in this study talked about their coaches allowing them to work through intra-team conflict on their own. These examples may be an indication of intellectual stimulation behaviours, but this component of transformational leadership was not

specifically emphasised by the athletes. Further research is needed to explore this issue in more detail.

Unique qualities of sport

Transformational leadership was originally conceptualised using a sample of high-ranking executives within a business setting (Bass, 1985). There are important contextual differences between sport and business that may offer insight into the leadership behaviours and themes identified in this study and the distinctions noted with traditional frameworks of transformational leadership. First, the physical proximity in which the coach athlete relationship takes place is often different from a manager–employee relationship. This physical proximity also takes place in a setting where physical skills are being taught and physical contact is common. In order to give appropriate instruction coaches may physically demonstrate a skill, interact with athletes by physically positioning athletes' hands and feet, or give encouragement by a pat on the shoulder.

Second, athletes are likely facing different psychosocial developmental tasks than the average employee in business. For example, depending on the age of the athlete, issues associated with industry (i.e. developing self-confidence through complex skill mastery) and identity (Erikson 1950, 1968) are being negotiated as well as a number of other developmental processes. Conversely, employees in a business setting have different developmental tasks that typically involve concerns about generativity (i.e. being a productive contributor to society and helping to guide the next generation; Erikson 1950, 1968). Coaches who assist athletes in transitioning through these psychosocial stages by providing opportunities to gain competence (e.g. *motivating*) and establish an identity (e.g. *teaching life lessons*) in a supportive environment (e.g. *caring* and *trust*) outside of the sphere of parental influence may be perceived by athletes as particularly positive and impactful. In addition, it is possible that during these developmental phases coaches may be seen as parental figures, mentors, and role models, thus, tapping into a different motivational stimulus causing athletes to seek approval more so than in other relationships. Acting in these roles may also serve as the impetus for greater respect, thus facilitating greater internalisation of life lessons taught by coaches.

Third, interactions between leaders and followers will be different based on group size. In this study, the size of the teams in which the leader–follower interaction occurred may be smaller than in a traditional business setting. Meta-analytic research suggests that as group size increases, leaders are more likely to engage in behaviours that deal with the structure of the group and roles of group members rather than attending to the needs of individuals (Mullen *et al.* 1989). The sizes of the sport teams in the current study were relatively small. Therefore, coaches could have been less concerned with group structure and could focus on relational aspects of their position such as caring and building trust. Additionally, research on coaching efficacy has indicated that coaches who demonstrated high levels of confidence in their abilities as a coach, spent less time in organisational behaviours (Feltz *et al.* 1999), potentially freeing up time to fine-tune their interactions with their athletes to build positive relationships. In this study, athletes related experiences of their most influential coaches who had cultivated constructive relationships. It is possible that these coaches were comfortable enough with typical coaching behaviours

(e.g. organising practices, teaching skills) so they could direct their attention to building these relationships.

Finally, for athletes of varying ages, sport is a voluntary activity engaged in, at least partially, for intrinsic reasons (e.g. the pleasure derived from the activity; Scanlan *et al.* 1993, Amorose and Horn 2000, McCarthy and Jones 2007). Adults ensconced in the world of work and careers may be driven by more extrinsic reasons (e.g. salary, promotions, Rynes *et al.* 2004). Importantly, sport researchers have indicated that often athletes' motivations depend on coaches' behaviours (Amorose and Horn 2000). Thus, the inherent motivational differences between young athletes and adults in work settings combined with the different purposes of the activities may account for differences in how transformational leadership is expressed and experienced. For example, adults may be more preoccupied with supporting themselves and their families by procuring greater financial benefits while adolescents may be driven by a desire to enhance personal performance or please the coach. Differences between sport and business domains are likely to provide insights into the differences between transformational leadership in sport and transformational leadership in business, education, or government settings. Previous research has acknowledged that the effectiveness of certain leadership behaviours may vary depending on the context (Antonakis *et al.* 2003). For example, Chelladurai (2007) suggests that athlete satisfaction and performance are influenced by coaches' ability to adapt coaching behaviours to situations and athlete characteristics. Future research should explore how contextual differences contribute to different expressions and experiences of transformational leadership in sport.

Contributions, limitations and future research

This study makes valuable contributions to the existing body of research on transformational leadership in sport. First, it offers some insight into how current conceptualisations of transformational leadership can be adapted to sport based on the unique aspects of sport participation. For example, a transformational leader in a supervisory role in a business setting may choose to use intellectual stimulation by encouraging followers to creatively and innovatively provide solutions to problems. However, a transformational coach working with adolescent athletes may choose to use intellectual stimulation differently by asking athletes thought provoking questions to help them understand strategies, thereby creating greater 'buy-in' and effort. In this study, transformational leadership seemed to be experienced by athletes differently because of the unique setting of sport competition. Second, adding qualitative research to the existing quantitative body of research on transformational leadership in sport enhances our understanding of the construct. Qualitative research adds depth to our current knowledge and expands conceptual boundaries. Finally, investigating transformational leadership in sport from the athlete perspective offers a new viewpoint for coaches in their understanding of how to interact with athletes. Indeed, several practical applications can be made to coaching practices. For example, coaches may choose to focus on developing caring, personal relationships with each athlete. Also, coaches should gain an awareness of their expectations and how they impact their athletes.

Some limitations to the study should be noted. First, the authors acknowledge the interpretive nature inherent in this research. In an effort to increase the trustworthiness of the findings, various strategies including rapport building, reflexive

journaling, data saturation, use of critical friends, and member checks were used to increase the likelihood that the findings reported in this manuscript reflect a fair and respectful synthesis of athletes' perspectives of transformational leadership. That athletes were in the midst of their collegiate experiences may also have influenced their responses, in so far, as they had not yet had the benefit of time to reflect on the impact of influential coaches in their lives. Answers given to the questions in the interviews may change as athletes mature and their reflections on their personal experiences grow. In the future, it would be beneficial to focus on a sample of retired athletes who have had time to reflect and understand the extent to which coaches made a lasting impact on their lives. In addition, the use of an all-female sample limits the interpretation of results to female populations. Future research should investigate similar questions using a mixed-gender sample of athletes. Similarly, the athletes in this study were recruited from one regional area in the United States of America. As a result, athletes may have shared characteristics that account for some of the similarities and differences in transformational leadership discussed here. Although the interviews continued until data saturation occurred, it is also important to recognise the relatively small sample size as a potential limitation. Also, the method of sampling involved asking coaches for permission to contact their athletes about their positive experiences with coaches. Therefore, the coaches may have selected athletes that had particularly positive experiences with them. However, these athletes were not instructed to talk about their current coaches. They were invited to share experiences about any coach who had influenced them positively. Nevertheless, many of the athletes in this study were leaders of the team and appeared to have strong relationships with their current coaches. This may suggest that players who invest in their athletic careers and are highly skilled may be more open to being influenced by their coaches. Future research should examine possible differences in the influence transformational coaches have on more or less skilled athletes. Another suggestion for future research includes specific investigation into transformational leader behaviours that may influence group dynamics and role acceptance in team settings. Finally, we acknowledge that our interview guide was pointed in its focus and directed participants toward answering questions about their positive coaches.

It was clear from the interviews that coaches can have a transforming effect on athletes. Previously, transformational leadership had not been qualitatively examined within a sport setting with the aim of determining the essence of this style of leadership in sport. This study attempted to clarify how Bass' transformational leadership components can be adapted to the sport domain and create a starting point for future discussions on transformational leadership in coaching. While there was some overlap between the components of transformational leadership in sport and other settings, there were also some divergences from traditional components. For example, intellectual stimulation did not appear to be a prominent theme. Additionally, a major finding of this study was that caring was an essential element of the interactions between coaches and athletes which facilitated the positive impact on athletes. Interpersonal interactions between coaches and players both on and off the field were driven by the strength of the relationship built between coaches and athletes. Based on the findings of this investigation it may be necessary to adapt the components of transformational leadership specifically to the sport domain. One adaptation to the inspirational motivation component might include the emphasis on 'pushing' athletes toward excellence (mentally and physically), but doing so from a position

of caring. Another adaptation might include using athletic competition as a vehicle for teaching life lessons, as a means of demonstrating idealised influence. Given the important role of coaches, transformational leadership in sport warrants continued attention.

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CHAPTER 3

STUDY 2: THE INFLUENCE OF COACH TRANSFORMATIONAL LEADERSHIP ON POSITIVE YOUTH DEVELOPMENT WITHIN AND BEYOND SPORT

Introduction

The quality of the experiences athletes have in sport is largely determined by their coach (Mageau & Vallerand, 2003; McGuire, 1992; Weathington, Alexander, & Rodebaugh, 2010). Coaches can influence athlete drop-out rates (Barnett, Smith, & Smoll, 1992), motivational orientations (Smoll, Smith, & Cumming, 2007), effort (Rowold, 2006), and overall engagement (Mageau & Vallerand, 2003). Additionally, positive sports experiences are often attributed to the development of appropriate coach-athlete relationships (Jowett & Chaundy, 2004). However, coaches can also have a negative effect on the motivation, development, and participation choices of athletes (Bailey, Cope, & Pearce, 2013). Clearly, a coach's influence permeates the athletic experience. This study explores the influence of transformational coaching on indicators of positive youth development, both inside and outside of sport in a sample of adolescent basketball players. Findings may help coaches foster more positive experiences for athletes in sport.

Transformational Leadership

The term *transforming leadership* stems from Burns' (1978) thoughts that such leaders appeal to followers' higher order needs for self-actualization, or realization of potential. They lift others to their better selves, eliciting a positive change (Burns, 1978). The notion of inspiring positive change in followers distinguishes this type of leadership from other theories, which are transactional in nature (Blanchard, Zigarmi, & Nelson, 1993; Feidler, 1964; Kirkpatrick & Locke, 1991; Mumford, Zaccaro, Connelly, & Marks, 2000; Zaccaro, Kemp, & Bader, 2004). Bass (1985) further refined the conceptualization of TL to include the following components: inspirational motivation, intellectual stimulation, individualized consideration, and idealized influence. The more leaders adopt these components, the greater transformative impact they will have on followers (Judge & Piccolo, 2004). The development of the Differentiated Transformational Leadership Inventory (DTLI; Callow, Smith, Hardy, Arthur, & Hardy, 2009) in sport was based on the initial views of Bass (1985) and Podsakoff and colleagues (1990). Initial research in sport suggests that coaches' transformational behaviors are associated with greater intrinsic motivation of athletes (Charbonneau, Barling, & Kelloway, 2001), increased athlete effort (Rowold, 2006), social and task cohesion among teams (Callow et al., 2009; Smith, Arthur, Hardy, Callow, & Williams, 2013), and athlete well-being (Stenling & Tafvelin, 2014). Despite some initial investigations into TL outcomes, many areas are yet unexplored. For example, although TL has been associated with positive developmental outcomes in youth sport (Vella, Oades, & Crowe, 2013), no studies have tapped into coaches' potential transformative impact on outcomes beyond sport.

Positive Youth Development

The impact of leadership on followers is arguably the most important part of leadership. Many coaches view player development and teaching life skills as an integral part of their job (Gould et al., 2007; Vella et al., 2011). In addition, athletes believe coaches' behaviors are related to the development of life skills (Gould & Carson, 2010). According to seminal work by the Search Institute, the presence of certain developmental experiences and supports called assets will enable youth to become successful and thriving adults (Scales, Benson, Leffert, & Blyth, 2000). All of this research falls under the overarching term of positive youth development (PYD).

To measure developmental outcomes likely to develop as a direct result of participation in sports, MacDonald and colleagues created the Youth Experience Survey for Sport (YES-S; MacDonald, Coté, Eys, & Deakin, 2012) based on the original work of Hansen and Larson (2005). Four positive subscales (personal and social skills, cognitive skills, goal setting, and initiative) and one negative subscale (negative experiences) are included. Initial evidence suggests that the YES-S is a valid and reliable measure of positive and negative youth sport experiences (McDonald et al., 2011; Vella, Oades, & Crowe, 2013). However, it is fairly new and its psychometric properties need further examination.

It is also important to identify the internal characteristics of followers that are an essential piece of PYD, but may not be directly associated with the sport experience. That is, what desirable attributes can be fostered among sport participants, even though the attribute might not be directly associated with the primary goal of sport participation? Lerner and colleagues (2005) developed the Five Cs framework – competence,

confidence, connection, character, and caring/compassion – to recognize and understand the critical developmental competencies that youth must cultivate if they are to experience PYD. The Five Cs PYD framework has received the most empirical support (Heck & Subramanian, 2009) outside of sport. For example, the Five Cs have been connected with less depression, delinquency, and risk behaviors (Gestsdottir & Lerner, 2007). Within sport, however, empirical research has not found support for the Five Cs framework (Jones, Dunn, Holt, Sullivan, & Bloom, 2011). Jones and colleagues acknowledge that further research on the Five Cs framework is necessary to determine whether or not the Five Cs can be developed in sport contexts.

Recently, Geldhof and colleagues (2014) created a very short measure of PYD based on the Five Cs conceptualization in adolescent psychology. Their extensive examination of model factor structure and subsequent model revisions resulted in a valid and reliable PYD-Very Short Form (PYD-VSF; 17 items). In order to gain a more comprehensive view of PYD, in this study, both personal attributes (PYD-VSF) and sport competencies (YES-S) were examined as outcomes reflecting positive youth development.

Transformational Leadership and Positive Youth Development

To the best of the researcher's knowledge, only one study has examined TL and PYD in sport. Recently, in a sample of adolescent soccer players, Vella and colleagues (2013) investigated the influence of athletes' perceptions of TL, coach-athlete relationships, and team success on sport-related PYD. Transformational leadership significantly predicted 11% of the variance in PYD, suggesting TL behaviors impact

youth development. This study was characterized by two limitations. First, it did not examine the link between TL and PYD outside of the sport context, which is fundamental to optimal development. This seems particularly relevant because an important part of transformational leaders (to facilitate achievement of followers' personal goals) extends beyond their immediate purview into personal development. Second, this study did not account for the inherent nesting that naturally occurs on sport teams, meaning participants are contained within teams. From a theoretical perspective, a natural hierarchical structure exists, where athletes are nested within teams, thereby sharing experiences. Importantly, when these shared experiences are not accounted for, the important assumption of independent observations may be violated, and results may be inaccurate. This study addresses limitations noted above by multiple measures of PYD that consider distinct aspects of youth development and by using multilevel modeling to account for the hierarchical structure of teams.

The Present Study

For the present study, I first examined the influence of perceived coach TL behaviors on young athletes' personal attributes associated with PYD. Next, I examined the influence of perceived coach TL behaviors on sport-related competencies. In other words, the first two purposes sought to answer the question: do transformational coaches enhance positive developmental outcomes? Further, I also sought to determine if the relationship between TL and PYD was influenced by coach gender and athlete age. The inclusion of gender in this study was based on previous literature suggesting the presence of participant gender differences in community youth development programs (Lerner et

al., 2005). Additionally, researchers acknowledge that in both general leadership (Chelladurai & Arnott, 1985; Eagly, Karau, & Makhijani, 1995) and transformational leadership (Eagly, Johannesen-Schmidt, & van Engen, 2003), leader gender is a salient consideration. Age considerations were included in this study based on studies indicating that PYD slightly decreases as youth entered middle school (Côté, Baker, & Abernathy, 2007; Côté & Fraser-Thomas, 2007; Phelps et al., 2009),

I hypothesized that athlete perceptions of transformational leader behaviors would be positively related to PYD outcomes (i.e., YES-S and PYD-VSF). Furthermore, I hypothesized that these relationships would vary from team to team. More specifically, teams that perceived their coach engaging in more TL behaviors would report greater PYD outcomes. I hypothesized that perceptions of coach transformational behaviors would have more influence on YES-S outcomes, which relate directly to sport, than the PYD-VSF outcomes focusing on personal attributes beyond sport. Given the ambiguity in previous findings related to the effect of gender on leadership outcomes (Peachey & Burton, 2011) and previous literature suggesting the presence of gender differences in community youth development programs (Lerner et al., 2005), I hypothesized only the presence of a gender difference. Also, based on previous literature suggesting that increases in athlete age are accompanied by greater PYD, I hypothesized that as age increased, PYD would also increase (Phelps et al., 2009).

Method

Participants

Two hundred and one individuals nested within 28 male (*n*=17) and female (*n*=11) youth basketball teams playing in an Amateur Athletic Union (AAU) tournament held in the Mountain West Region of the United States participated in this study. Participants ranged from 11-18 years old (*m* = 13.88, *SD* = 1.46) and represented a racially diverse group comprised of Caucasians (50%), African Americans (11.7%), Latinos (8.7%), Pacific Islanders (4.4%), Asian (2.5%), and 22% who identified their ethnicity as "Other." Teams came from Colorado, Idaho, New Mexico, Montana, and Utah. Over 70% of participants reported being with their coach for more than 1 year. Of the 28 participating teams, 22 were coached by males. Many young athletes who participate in AAU basketball aspire to earn a college scholarship. These athletes (and their parents) can be characterized as highly invested, elite level, competitive youth basketball players.

Procedures

Upon approval from the lead author's university Institutional Review Board (IRB) and the tournament's chairperson, coaches were contacted via email and invited to participate. The 3-day tournament took place during the summer and teams played at one large indoor venue. A quiet room on location was reserved for data collection. Teams (comprised of at least 4 members) were recruited to participate in the study. During a convenient time for the team, teams came to the research room, assent/consent was received, and the athletes completed a survey packet. As an incentive for team

participation, a drawing for a $20 Footlocker gift card took place for each team after completion of the surveys.

Measures

Transformational Leadership

The DTLI (Callow et al., 2009) evaluates coach TL behaviors from the athletes' perspective. Using the stem "My coach…," players rated their level of agreement with 25 statements about their coaches' behaviors on a scale from 1 (*not at all*) to 5 (*all of the time*). The DTLI contains seven subscales: individual consideration, inspirational motivation, intellectual stimulation, fostering acceptance of group goals and teamwork, appropriate role model, high performance expectations, and contingent reward. The DTLI displayed adequate reliability in previous research (Vella, Oades, & Crowe, 2012), and was also in acceptable ranges for this study (α = .93).This factor structure was supported using an adult population in competitive sport (Callow et al., 2009). Based on the current population of interest, the competitive AAU basketball environment, where performance is important, the original DTLI was used.

Youth Developmental Outcomes

The Youth Experience Survey for Sport (YES-S; MacDonald et al., 2012) was used as a measure of the assets and skills developed in the process of youth sport participation. Participants were asked to determine how well 37 statements described their experience on this particular sport team on a scale from 1 (*not at all*) to 4 (*yes definitely*). Previous studies have indicated adequate reliability for similar age groups

(Hansen, Larson, & Dworkin, 2003; Macdonald et al., 2012), and in this study, reliability of the YES-S was acceptable (α = .84).

The Positive Youth Development – Very Short Form (PYD-VSF; Geldhof et al., 2014) was used to measure the Five Cs – Competence, Confidence, Character, Caring, and Connection. Participants reported how much they agreed with each of the 17 items using a Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The stem, "In general…" is used to prompt reflection beyond sport. Geldhof et al. (2014) provide reliabilities for individual subscales ranging from α = .80 to .93. For the current study, the full scale reliability was used and was found to have acceptable reliability (α = .87).

Data Analysis

To address the purposes of the study, multilevel modeling (MLM) was employed. MLM is a method of regression that recognizes the hierarchical structure inherent in certain situations (Luke, 2004). Regular multiple regression analysis assumes that all observations in data collection are independent of one another. However, as individuals on a team share a head coach, the examination of the athletes' perceptions and developmental outcomes are not independent of one another. By using MLM, standard errors reflect the nonindependence of individuals participating on teams (Tabachnick & Fidell, 2014).

MLM was used to determine the influence of head coach TL on the developmental outcomes of teams and individuals at both between-team (group) and within-team (individual) levels. Because perceived coaching behaviors were reported by multiple athletes on a team, the association between perceived TL behaviors and

developmental outcomes can be decomposed into between-team effects (i.e., do teams with higher average perceived TL coaching behavior scores also report higher on positive developmental outcomes) and within-team effects (i.e., relative to other athletes on a given team, do athletes with higher relative perceived TL coaching behavior scores also have higher relative developmental outcomes). Based on the complexity of the models, I opted to use total TL, YES-S, and PYD-VSF scores, not subscale scores (Bell, Ferron, & Kromrey, 2008).

The multilevel models predicting YES-S and PYD-VSF were built in a stepwise manner with subsequent proposed models increasing in complexity (Tabachnick & Fidell, 2014). Appendix A contains each model's combined equation format. For all models in this study, *i* represented individual players and *j* represented teams. For both YES-S and PYD-VSF outcomes, the same approach for building models was used. First, the unconditional means model was examined (no predictors). This model was valuable, because it provided a decomposition of the variance explained at individual and team levels for each outcome variable. The unconditional model (1a) was followed by model 1b with TL as level 1 (individual) and level 2 (team) predictors. In model 1c, age (level 1) and coach gender (level 2) were added as predictors. Finally, cross-level interactions for TL (individual by team) and age (individual by team) were examined in model 1d.

To compare models for parsimony and estimate goodness of fit, the Akaike Information Criterion (AIC; Akaike, 1987) and Bayesian Information Criterion (BIC; Raferty, 1995) statistics were calculated. These statistics are important in determining the best fitting model based on number of parameters (AIC) or number of parameters and sample size (BIC), where lower values indicate better fitting models (Tabachnick &

Fidell, 2014). No guidelines are given for interpretation of these values. Therefore, researchers must determine meaningful decreases based on parsimony, variance explained, and the interpretability of the results. For the current study, the AIC and BIC values were considered to determine model fit and identify the most parsimonious model.

In general, MLM predictors are centered to create a meaningful zero value, thereby facilitating interpretation of the results and decreasing multicollinearity issues. In this study, TL was group-centered at the individual level and grand-mean centered at the team level. Group-centered (GPC) variables indicate the deviation of the individual from their nested group's average. Thus, an individual's TL score can be interpreted as a deviation from the group mean. Grand-mean centered (GC) variables indicate the deviation of the individual from the study sample average. Therefore, a team's TL score can be interpreted as the team's deviation from the grand mean of all teams' average scores, which in this study was 4.29 (*SD* = .55). Age was also group-centered at the individual level to indicate the deviation of an individual from the average age of the team. Overall age of the team was represented by the team's age and was coded 0 (*6th grade*) through 5 (*varsity*). Therefore, a team's age division score can be interpreted as a deviation from the grand mean of 2.25 (8th grade division). Coach gender was coded 0 for females and 1 for males.

Using HLM (version 7.0; Raudenbush, Bryk, & Congdon, 2011), two separate multilevel analysis models were created based on predicting the development of sport competencies (i.e., YES-S) and the development of personal attributes, or the 5 C's (i.e., PYD-VSF). Each model included team level variables and individual level variables. For example, TL was conceptualized at the team level as team perceptions of TL, and at the

individual level as individual perceptions of TL. Raudenbush and Bryk (2002) recommend that calculating the intraclass correlation (ICC) should be the first step of a multilevel analysis. The ICC estimates the proportion of the dependent variable's variance accounted for at the team and individual levels. The ICC was calculated for YES-S and PYD-VSF outcomes.

Results

Descriptive Statistics

Within SPSS, data were cleaned and screened for outliers using Mahalanobis distance. Less than 2% of the data was missing; therefore, expectation maximization was used to impute data. Descriptive statistics for the entire sample, including by gender and coach gender, are displayed in Table 3.1.

Competencies Developed through Sport (YES-S)

Calculation of the ICC for the YES-S, indicated that 21% of the variance was accounted for at the team level, while 79% of the variance was accounted for at the individual level (model 1a). Table 3.2 shows the results of the multilevel models for competencies developed through sport participation (YES-S). In model 1b, the score for perceptions of TL was added as a predictor at both the individual and team levels. The main effect of TL at the individual level on YES-S scores was $\beta = 0.18$, $p < .001$; thus, individuals who perceived higher levels of TL (relative to the team) reported higher levels of skill and asset development in sport.

Table 3.1
Descriptive statistics for TL and developmental outcomes

Variable	Females	Males	Female Coach	Male Coach	Total Sample
	Mean (*SD*)	Mean (*SD*)	Mean (*SD*)	Mean (*SD*)	Mean (*SD*)
TL	4.29 (0.55)	4.28 (0.55)	4.43* (0.39)	4.25* (0.58)	4.29 (0.55)
PYD-VSF	4.36 (0.44)	4.32 (0.48)	4.25 (0.54)	4.36 (0.44)	4.35 (0.45)
YES-S	2.85 (0.24)	2.96 (0.34)	2.78** (0.25)	2.95** (0.31)	2.91 (0.30)

Given the amount of unexplained variance in competencies developed through sport as measured by the YES-S, and in conjunction with the purposes of this study, I modified the model by including athlete age as a level-1 predictor and coach gender as a level-2 predictor for model 1c. There was no significant effect for age, $p = .98$. There was a significant main effect for coach gender, $\beta = 0.15$, $p = 0.02$. TL at the individual level remained a significant predictor, $\beta = 0.18$, $p < 0.001$.

To test for interaction effects across levels, two additional models with interaction terms were tested. The interaction between TL at the individual and team levels was added first in model 1d, followed by the interaction between individual age and team age division in model 1e. While this interaction was statistically significant, the effect size, calculated as a proportion of reduction in variance, was low. After all predictors were added, there was only a 3% reduction in residual variance. Thus, the hypotheses for youth development outcomes and coach gender were supported, but the hypothesis for athlete age was not supported.

Table 3.2
Variance component models for sport skills and asset development (YES-S)

Parameter	Model 1a Estimate (s.e.)	Model 1b Estimate (s.e.)	Model 1c Estimate (s.e.)	Model 1d Estimate (s.e.)	Model 1e Estimate (s.e.)
ICC	.21	.21	.19	.18	.18
Fixed					
Intercept γ_{00}	2.92*** (0.03)	2.91*** (0.03)	2.80*** (0.05)	2.79*** (0.05)	2.79*** (0.05)
TL (Team) γ_{01}		0.12 (0.10)	0.15 (0.09)	0.15 (0.09)	0.15 (0.09)
Coach Gender, γ_{02}			0.15* (0.06)	0.15* (0.06)	0.15* (0.07)
Team Age, γ_{03}					0.00 (0.02)
Slope, TL (Individual) γ_{10}		0.18*** (0.05)	0.18*** (0.05)	0.22*** (0.06)	0.23*** (0.06)
Slope, Age (Individual) γ_{20}			0.00 (0.02)	0.00 (0.02)	0.07* (0.03)
TL –Individual x Team Level, γ_{11}				0.16 (0.09)	0.15 (0.09)
Age x Team Age, γ_{21}					-0.02* (0.01)
Random					
Team-level variance u_0	0.02*** (0.14)	0.02*** (0.14)	0.02*** (0.12)	0.02*** (0.12)	0.02*** (0.12)
Individual-level variance *r*	0.07 (0.27)	0.07 (0.26)	0.07 (0.26)	0.07 (0.26)	0.07 (0.26)
AIC	85.04	73.81	78.77	77.15	87.28
BIC	91.67	80.42	85.38	83.75	93.90

Note. ***indicates significance at .001; * indicates significance at α =.05; ** indicates significance at α =.01

Personal Attributes (PYD-VSF)

Table 3.3 shows the results of the models for personal attributes developed in general (PYD-VSF). For the PYD-VSF, 20% of the variance was accounted for by teams, leaving 80% accounted for by individual level variables (model 2a). In model 2b, perceptions of TL were added at the individual and team levels. The main effect of TL at the individual level on PYD-VSF was $\beta = 0.27$, $p = .002$. The main effect of TL at the team level on PYD-VSF was $\beta = 0.34$, $p = 0.02$.

In model 2c, coach gender was added as a predictor at level 2 and participant age was included as a predictor at level 1. Main effects of TL at the team level, $\beta = 0.23$, $p = 0.01$ and TL at the individual level, $\beta = 0.27$, $p = 0.003$, remained. Therefore, the primary hypothesis for positive development outcomes was supported, but the hypothesis surrounding the main effects influence of coach gender and athlete age was not.

To examine interaction effects between levels, two additional models were tested, as shown in Table 3.3. First, the interaction between TL at the individual level and team level was added (model 2d). The interaction term of TL at both levels was significant, $\beta = .60$, $p < 0.001$. With the addition of this interaction term, significant main effects remained for individual TL, $\beta = .23$, $p = 0.02$, and team TL, $\beta = .42$, $p < 0.001$. Both coach gender and participant age remained nonsignificant predictors. Next, an interaction term was added based on the combination of individual age and team age (model 2e). Significant main effects remained for team and individual TL, $\beta = .41$, $p <0.001$, and the interaction term of team and individual TL, $\beta = .62$, $p <0.001$. Of note, main effects for individual age, $\beta = -.08$, $p = 0.02$, and team age, $\beta = -.12$, $p <0.001$,

Table 3.3
Variance component models for positive youth development outcomes (PYD-VSF)

Parameter	Model 2a Estimate (s.e.)	Model 2b Estimate (s.e.)	Model 2c Estimate (s.e.)	Model 2d Estimate (s.e.)	Model 2e Estimate (s.e.)
ICC	.21	.22	.22	.24	.25
Fixed					
Intercept γ_{00}	4.35*** (0.05)	4.36*** (0.05)	4.31*** (0.11)	4.28*** (0.11)	4.27*** (0.11)
TL (Team) γ_{01}		0.34* (0.08)	0.23* (0.09)	0.23* (0.09)	0.23* (0.09)
Coach Gender, γ_{02}			0.10 (0.12)	0.10 (0.12)	0.10 (0.12)
Team Age, γ_{03}					-0.11*** (0.02)
Slope, TL (Individual) γ_{10}		0.27** (0.09)	0.27** (0.08)	0.41*** (0.06)	0.41*** (0.06)
Slope, Age (Individual) γ_{20}			0.05 (0.04)	0.05 (0.04)	-0.08* (0.04)
TL –Individual x Team Level, γ_{11}				0.60*** (0.09)	0.62*** (0.09)
Age x Team Age, γ_{21}					0.04*** (0.01)
Random					
Team-level variance u_0	0.05*** (0.21)	0.04*** (0.20)	0.04*** (0.20)	0.04*** (0.21)	0.04*** (0.21)
Individual-level variance *r*	0.17 (0.42)	0.15 (0.39)	0.14 (0.37)	0.14 (0.37)	0.13 (0.37)
AIC	254.98	228.61	233.97	219.57	212.81
BIC	261.60	235.22	240.58	226.18	219.45

Note. *** indicates significance at .001; * indicates significance at α =.05; ** indicates significance at α =.01

became significant. Also, the interaction of individual age and team age was significant, $\beta = .04$, $p < 0.001$.

Discussion

This study examined the relationships between athletes' perceptions of coach TL behaviors and PYD outcomes using two facets of positive development outcomes – 1) sport competencies, and 2) personal attributes. I also examined the impact of coach gender and athlete age on the relationship between TL behaviors and PYD outcomes. Based on the results, there are several important findings. The discussion will first focus on findings relative to TL and second, findings relative to the interactions of PYD and age. Lastly, the differences between the YES-S and PYD-VSF will be considered.

Transformational Leadership and Positive Youth Development

In line with the primary hypothesis, individual perceptions of greater coach TL led to greater PYD when using both the YES-S and PYD-VSF measures. Specifically, for every one unit increase in individuals' perceptions of the coach's TL, a player's score increased .22 and .41 on the YES-S and PYD-VSF, respectively. These important increases support the substantial amounts of variance that were explained by shared team characteristics for each measure – YES-S (21%) and PYD-VSF (20%). Thus, the hypothesis was supported and is consistent with previous research on TL in sport (Vella et al., 2013). In addition, these findings align with previous research demonstrating that coaches influence athletes in ways beyond sport skill development (Gould & Carson, 2011; Gould, Collins, Lauer, & Chung, 2007). The current study is the first to link TL

with personal attributes PYD.

Interestingly, team perceptions of TL did not significantly influence YES-S scores. While the positive impact of coach TL on athletes is neither surprising nor novel, the lack of team effect is interesting. However, in contrast to the YES-S findings, the relationship between TL and PYD-VSF was partially dependent on the team. In other words, PYD-VSF scores were influenced by the team's perceptions of TL, whereas YES-S scores were not. Perhaps, the ability to make connections between basketball and PYD sport competencies is predicated more on the individual coach-athlete relationship rather than general team-wide interactions.

Additionally, there was no significant interaction effect between individual and team level TL for YES-S scores, yet there was a significant cross-level interaction effect for PYD-VSF scores (see model 2e). This model suggests complex relationships between the variables that influence PYD for these youth basketball players. In essence, an individual's score on the PYD-VSF increased .23 per unit of team perception of TL score increase, .41 per unit of individual perception of TL increase, and .62 per unit of interaction term increase. This interaction between individual and team perceptions of TL indicates that a player's perception of TL can magnify or diminish a player's PYD-VSF scores based on the team's perception of TL. That is, the highest PYD-VSF scores were reported by athletes who had higher than average individual perceptions of TL and were on a team with above average team perceptions of TL (see Figure 3.1).

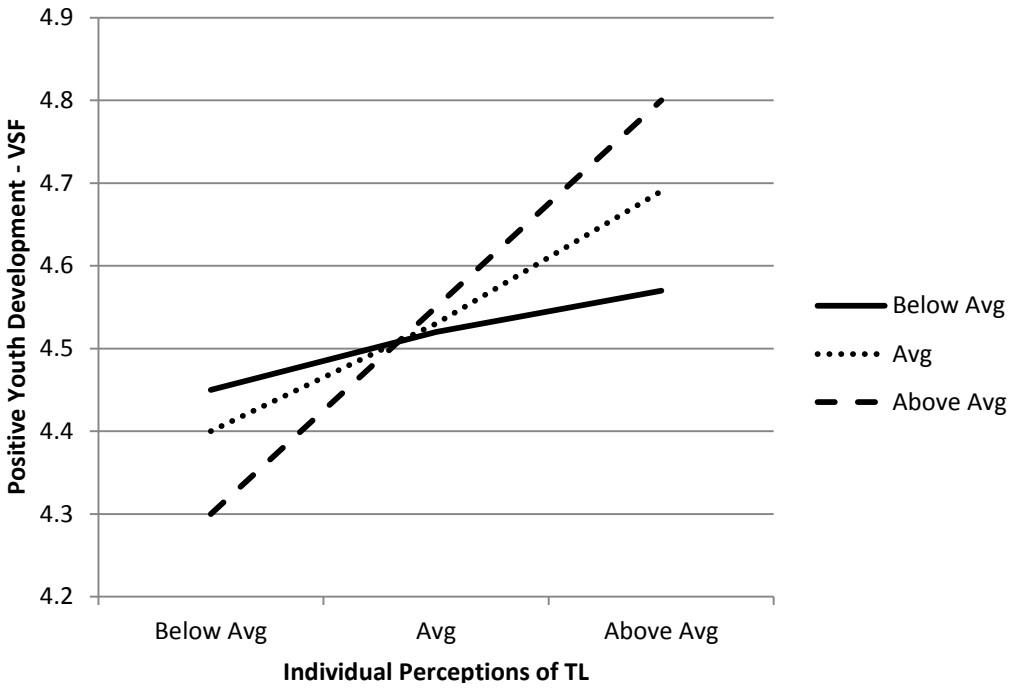

Figure 3.1 Team X Individual TL Interaction for PYD-VSF

Interestingly, coach gender was a significant predictor of YES-S scores, but not for PYD-VSF scores. Athletes who were coached by males reported higher YES-S scores. One explanation for this outcome may be that sport has traditionally been male-dominated and male-identified. Female coaches may have felt a need to demonstrate competence in relation to their male coaches by focusing on teaching sport skills and winning games (Theberge, 1993). Therefore, it is plausible that the female coaches in this study spent less time focusing on developing PYD competencies through sport. It may also be the case that athletes viewed their male coaches as credible basketball experts regardless of basketball expertise (Magnusen & Rhea, 2009) and, therefore, were more open to the influence of developmental cues and lessons.

Interaction of Age and Team Age Division in Relation to PYD

The interaction of individual age and team age division was significant with both the YES-S and the PYD-VSF, indicating that the effect of an athlete's age (relative to his/her teammates) on PYD scores was dependent upon the team's age division (see Figures 3.2 and 3.3). For YES-S scores, however, caution is warranted for two reasons. First, despite the statistical significance of the age interaction for YES-S scores, the practical significance of the age interaction on YES-S scores was minimal (perhaps a tenth of a point increase on developmental outcomes scores). Second, the model containing this interaction (model 1e) was not the best fit for the data according to AIC and BIC values.

Of the models tested for PYD-VSF, model 2e was the best fit and also included a significant individual age by team age division interaction. Interestingly, the hypothesis that individual age would be a significant predictor of positive developmental outcomes was not supported. However, in model 2e, the addition of an interaction term between individual age (relative to the team) and team age division changed the effect of individual age, making it significant in the negative direction, suggesting that athletes who were younger than their teammates reported greater positive developmental outcomes. The significant interaction of individual age and team age division (represented in Figure 3.3) indicates that athletes who were on teams in younger age divisions and who were younger relative to their teammates reported the highest scores on the PYD-VSF. Given the dramatic shift in directionality (positive to negative) of the relationship, this finding should be interpreted with caution. One explanation for this finding is the process of development among adolescents (Eccles & Gootman, 2002). As

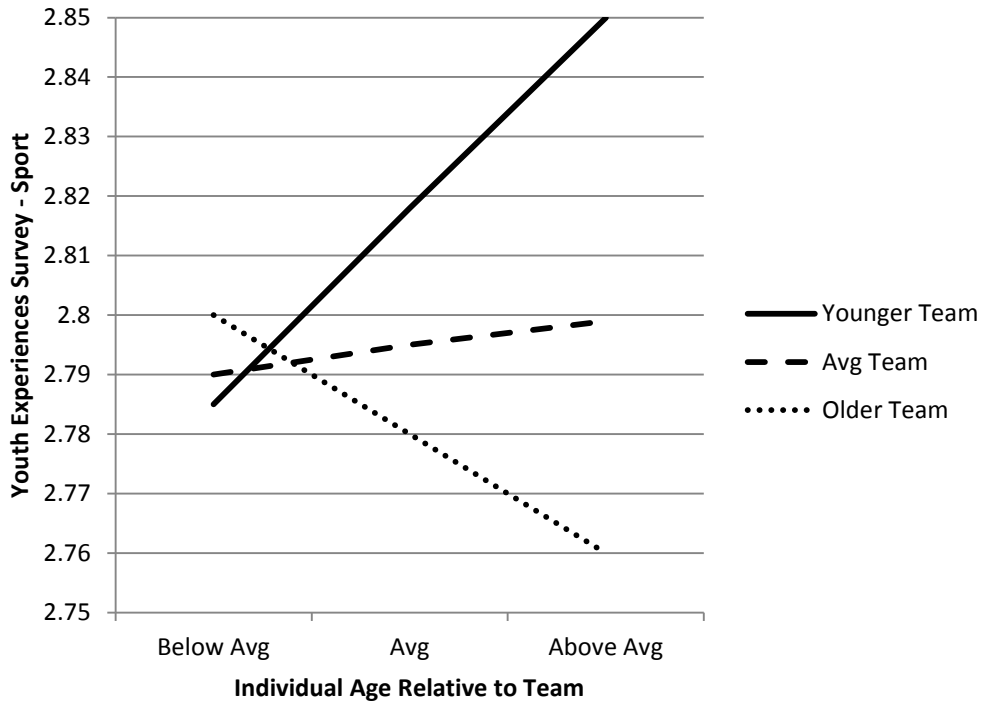

Figure 3.2 Age X Team Age Division Interaction for YES-S Scores

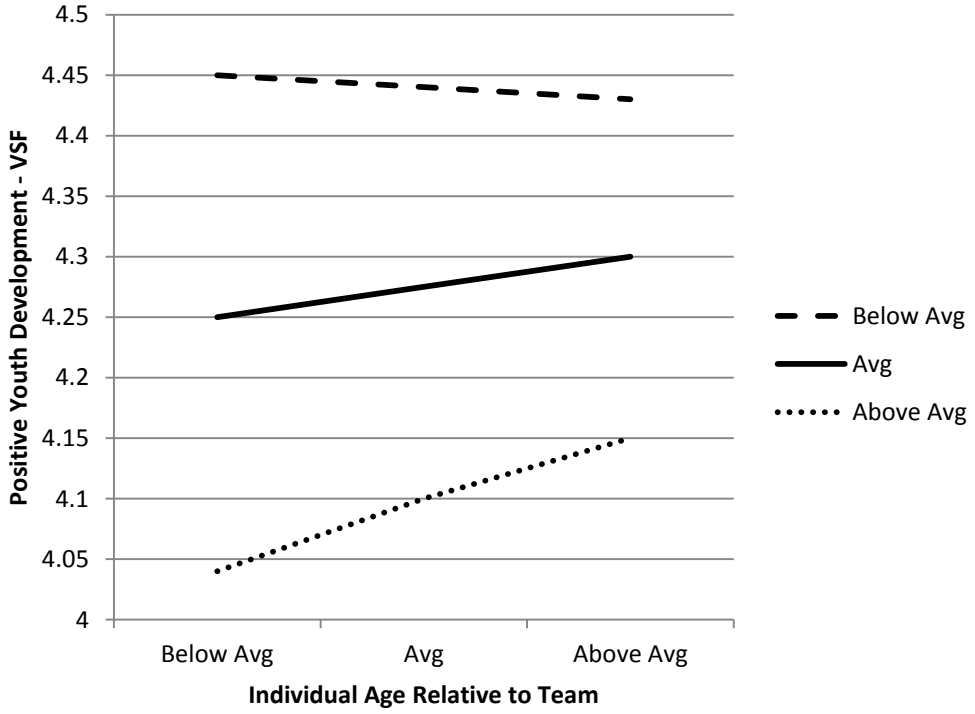

Figure 3.3 Age X Team Age Division Interaction for PYD-VSF Scores

an individual moves from early adolescence (ages 11-13) to late adolescence (ages 16-18), the process of identity formation becomes paramount and parental influence becomes less salient (Erikson, 1968; Kinney, 1993; Waterman, 1982). During this time, identity exploration apart from significant adults may explain the diminished influence of coach behaviors. Perhaps the increased value early adolescents place on interaction with extra-familial mentors (i.e., coaches) accounts for the higher scores on the PYD-VSF. Because the influence of the coach may not be as powerful during late adolescence, PYD may be less salient. Another possible explanation is that as teams compete in higher age divisions, a focus on winning and performance may be emphasized over developmental concerns (Apgar, 1977; Cumming, Smoll, Smith, & Grossbard, 2007). The consideration of pressure to win may be particularly important for the athletes competing in the AAU tournaments, where the goal of many older adolescent athletes is to obtain an athletic scholarship for college.

Limitations

It is important to acknowledge some of the limitations of this study. First, the mean scores for TL and PYD-VSF were relatively high. The high scores may have created a ceiling effect for these measures, limiting variation and causing a lack of precision of the results. Second, full scale scores were used in the analysis. Thus, particular links between subscales of TL and PYD were not examined. Third, in most cases, full teams did not complete the questionnaires. Although it is acceptable to have uneven numbers in groups for multilevel modeling (Tabachnick & Fidell, 2014), the aggregate scores for team perceptions of TL may not have come from a completely

representative range of scores for a team. Fourth, the cross-sectional nature of this study limits our ability to truly predict PYD outcomes based on coach TL. Finally, this research involved a very specific population of athletes participating in an AAU basketball tournament. The use of this population limits the generalizability of the results to other competitive youth sport populations.

Conclusion

This study examined the relationship between athlete perceptions of TL and PYD using multilevel modeling. Given the complexity of the analysis and findings, I feel it necessary to delineate and clarify my fundamental findings. First, YES-S model results indicated that adolescent basketball players who perceived their coach as more transformational than their teammates responded with greater PYD, meaning greater initiative, personal and social skills, goal setting, and cognitive skills related to basketball. Second, results of the PYD-VSF models indicated that model 2e fit the data best. This model suggests that basketball players who: a) perceived their coach as more transformational than their teammates, b) were on a team with higher perceptions of TL, c) were young relative to their team, and d) were on a team in a younger than average team division, demonstrated greater personal attributes of PYD, meaning greater competence, confidence, character, connection, and caring. Overall, this study provides invaluable insights into the complex relationship between PYD and TL.

CHAPTER 4

STUDY 3: MOTIVATIONAL GOAL ORIENTATIONS AND COACHING EFFICACY AS PREDICTORS OF TRANSFORMATIONAL LEADERSHIP BEHAVIORS

Introduction

Coaches play a powerful role in the development of youth athlete outcomes. Although leadership styles vary, a growing body of sport research links a TL style to positive outcomes (Tafvelin & Stenling, 2014; Vella, Oades, & Crowe, 2013). While several studies have examined the effects of TL, to my knowledge, none have examined factors that may influence sports coaches' proclivities to adopt TL behaviors. Two factors that may contribute to TL include motivational goal orientations and coaching efficacy.

It is important to understand factors that contribute to TL based on its potential to elicit a plethora of positive outcomes (Bass & Riggio, 2006). Transformational leaders encourage, inspire, and challenge followers to perform beyond expectations, and achieve self-actualizing goals by providing individual consideration and intellectual stimulation, fostering acceptance of group goals, and acting as a good role model (Bass, 1985; Burns, 1978). Athletes who have transformational coaches report greater intrinsic motivation (Charbonneau, Barling, & Kelloway, 2001), increased effort (Rowold, 2006), and enhanced social and task cohesion among team members (Callow et al., 2009). Further,

TL among coaches has been associated with athlete well-being (Stenling & Tafvelin, 2014). Unfortunately, it is also apparent that participation in youth sport can lead to negative outcomes (Balish, McLaren, Rainham, & Blanchard, 2014). Therefore, it is important to understand factors that lead to TL and ultimately to positive youth outcomes.

While TL is well articulated in other settings, it is important to provide an overarching framework specific to sport in which TL can be situated. In sport literature, Horn's (2008) working model of coaching effectiveness offers a lens through which to view TL. The model provides a broad framework incorporating antecedents, coach behaviors, and outcomes (performance and psychological) experienced by athletes. Within Horn's model, TL is situated as a coach behavior, preceded by antecedent factors and followed by outcomes.

A variety of antecedent factors inform coach behaviors in sport settings. Horn (2008) suggests three general antecedent categories: sociocultural context, organization climate, and coaches' personal characteristics. Although these factors affect coach behaviors, the model suggests that the relationship is mediated by coach expectancies, values, beliefs, and goals. Horn (2008) also posits that a multitude of theories, including achievement goal theory (Ames, 1992; Nicholls, 1984) and self-efficacy theory (Bandura, 1997), may contribute to our understanding of coaching effectiveness.

Motivational Goal Orientations

Within sport, the extant research points toward goal orientations as powerful predictors of a variety of outcomes. According to Achievement Goal Theory (AGT; Nicholls, 1984), behaviors are goal driven. In achievement settings, the primary goal is

the demonstration of competence. The collective work on AGT recognizes two dispositional goal orientations: task and ego (Ames & Archer, 1988; Duda, 2005; Dweck, 1986; Nicholls, 1984; Senko, Hulleman, & Harackiewicz, 2011). A task orientation is characterized by self-referenced conceptions of success. In this orientation, effort and personal improvement constitute success (Ames & Archer, 1988; Duda & Nicholls, 1992; Nicholls, 1984). In contrast, an ego orientation is characterized by other-referenced conceptions of success. Success is achieved by winning and outperforming others. Individuals differ in the extent to which they embrace particular goal orientations. Because goal orientations drive behaviors, and because success is an important goal for leaders, it is logical to expect that characteristics of coaching behaviors are linked to coaches' motivational goal orientations. While many studies have provided support for the importance of the coach's influence on athletes' motivation (Amorose & Horn, 2000; Hollembeak & Amorose, 2007; Pensgaard & Roberts, 2002), to my knowledge, none have examined the role of coaches' personal dispositional goal orientations as an antecedent to coaching behaviors. That is, to what extent do coaches' personal beliefs about success (i.e., task and ego goal orientations) influence their coaching behaviors?

Evidence in non-sport domains suggests that motivational goals contribute to greater TL behaviors. For example, Barbuto (2005) found that school administrators who were more intrinsically motivated displayed more TL behaviors. Trepanier and colleagues (2012) found strong positive correlations between autonomous motivation and self-reported TL in principals and vice-principals in school settings. Overall, these findings highlight that more intrinsically or integrated goals foster TL. Although these studies were conducted in education settings, the sport setting shares similarities. For

example, both students and athletes strive for achievement. Also, the structures of school and sports involve the important contributions of leaders; teachers and coaches greatly influence the experience of students and athletes. These similarities lend support for similar relationships between goal orientations and leadership within sport. Duda and Nicholls (1992) provided support for the application of goal orientations across domains. Thus, given these links and the similarities in settings, it is reasonable to project an association between leader dispositional goal orientations and transformational coaching behaviors.

Coaching Efficacy

Horn's (2008) model also suggests that coaches' beliefs influence their behaviors. Self-efficacy, the personal belief in one's ability to carry out a specific task, is one of the most powerful and influential beliefs in psychology (Bandura, 1997). Extensive research on self-efficacy within the field of sport and exercise suggests a positive relationship between beliefs about ability to perform and task performance (Feltz, Short, & Sullivan, 2008; Moritz, Feltz, Fahrback, & Mack, 2000). Coaching efficacy is the extent to which coaches believe they can influence the learning and performance of their athletes (Feltz et al., 1999). There are five dimensions of coaching efficacy, each aligning with a coaching competency of the National Association for Sport and Physical Education: motivation efficacy (coaches' belief in their ability to affect athletes' psychological skills and moods), character building efficacy (coaches' belief in their ability to affect athletes' personal development and attitude toward sport), game strategy efficacy (coaches' belief in their ability to lead during competition), teaching

efficacy (coaches' belief in their instructional and diagnostic skills during practice), and physical conditioning efficacy (coaches' belief in their ability to prepare athletes physically for sport participation).

Connections in prior research support the relevance of investigating coaching efficacy as an antecedent to TL. Coaching efficacy has been identified as a predictor of general leadership behaviors (Sullivan & Kent, 2003). When coaching efficacy was high, leaders felt that they were more effective instructors. Specifically, coaches who were high in motivational efficacy and teaching efficacy rated themselves as able to provide positive feedback and instruction, and engaged in these behaviors to a greater degree.

Conceptually, many behaviors associated with TL are connected to the dimensions of coaching efficacy. Fundamental to coaching efficacy is the belief in one's ability to affect certain changes in the athletes' learning and performance, which aligns with the philosophy of positive change adopted by transformative leaders. Furthermore, the emphasis placed on high morals and values within TL aligns with the degree to which a coach believes he/she can influence the athletes' personal development and attitude toward sport (character building efficacy). As another example, a transformational leader's motivational behaviors results from the degree to which the leader believes he or she can affect the psychological skills and mood of athletes (motivation efficacy). Therefore, cogent conceptual linkages exist between coaching efficacy and TL behaviors. Because Sullivan and Kent (2003) explored only general coaching leadership behaviors, the current study extends current research by exploring coaching efficacy as a predictor of a specific type of leadership behaviors, those of a transformational leader.

Although Horn's (2008) model of coaching effectiveness provides general

guidelines about the role of goals and beliefs in establishing coaching behaviors, it does not provide clarification of this relationship in sport. In the business context, Hendricks and Payne (2007) examined both leaders' goal orientations and self-efficacy. Participant-leaders were examined while leading four person teams in a manufacturing task. The authors reported moderate support for goal orientations as indirect predictors of leadership effectiveness. Specifically, their study indicated that other mediating variables, such as motivation to lead and leadership self-efficacy, influenced leadership effectiveness. While Hendricks and Payne's (2007) research was conducted in the business domain, these findings elicit interesting possibilities for similar questions in sport. Thus, I chose to examine the roles of leader goal orientations and coaching efficacy as antecedents of leadership in sport.

The aforementioned literature highlights numerous voids in the literature that this study was designed to address. Foremost among these voids is the lack of sport research on contributing factors to TL behaviors. To my knowledge, no studies have examined coaching efficacy and goal orientations as antecedents to TL, the focus of the current study. I used Horn's model of coaching effectiveness as a guide for situating these variables. Effective leadership is imperative to success. Transformational leadership is a well-researched construct in business and is emerging in sport. Within sport, antecedents of TL are virtually unexamined. Therefore, the purpose of the current study was to examine leader dispositional goal orientation and coaching efficacy as antecedents of transformational coaching.

Hypothesized Model

The hypothesized model positioned goal orientations and coaching efficacy as predictors of TL (Figure 4.1). In this model, ego and task subscales were presented as separate latent variables informed by parceled indicators (Little, Cunningham, Shahar, & Widaman, 2002), while coaching efficacy and TL were latent variables manifested by the respective subscale scores as indicators. Based on previous research, I expected that coaching efficacy would be positively related to TL. Given the relationships suggested previously, I felt it was likely that the motivation efficacy and character building efficacy subscales would be most strongly related to the inspirational motivation, individualized consideration, and appropriate role model subscales of TL. Feltz and colleagues (1999) suggested that leaders who are more confident in their content knowledge are likely to have greater focus on interpersonal interactions. Because TL behaviors are focused on the leader-follower interaction, I hypothesized that game strategy efficacy, technique efficacy, and physical conditioning efficacy subscales – all related to coach knowledge –

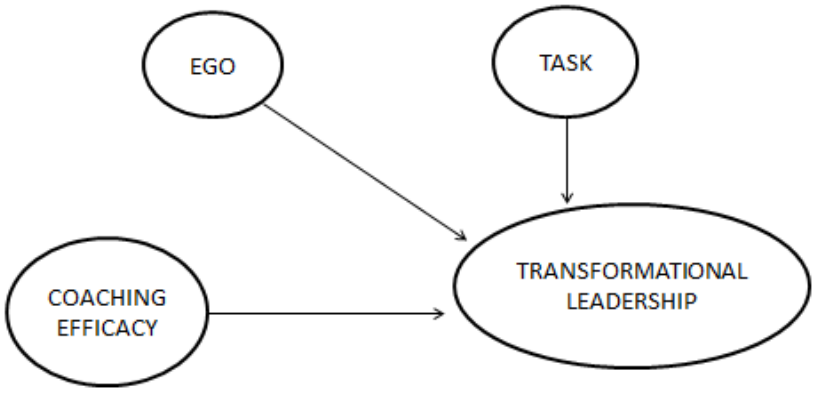

Figure 4.1 Hypothesized relationships between ego orientation, task orientation, coaching efficacy, and transformational leadership

were likely to be related to TL as well, particularly the intellectual stimulation, inspirational motivation, and individualized consideration subscales. Furthermore, it was unclear how task and ego orientations would be related to TL behaviors in a coach. However, it is reasonable to suggest that both task and ego orientations would likely be related to TL behaviors.

Method

Procedures

Youth basketball coaches were recruited by email, social media, phone calls, and personal contact at an AAU tournament. A brief explanation of the study was provided in a medium relevant to the contact (email, social media, phone, etc.). Coaches who expressed a willingness to participate were sent a link to the study questionnaire which was administered online via REDCAP. Questionnaires took no longer than 15 minutes to complete.

Participants

Male (n = 102) and female (n = 20) head coaches of boys' and girls' basketball players ages 12 to 18 on teams from across the United States completed the online survey for this study. Coaches (ages 18 to 68, m = 42.70 years) reported an average of 13.14 years of coaching experience (range = 0-40 years, SD = 9.24). Additionally, coaches were primarily Caucasian (74.6%) and worked with mostly varsity (n = 53) and 7-8th grade (n = 42) athletes.

Measures

Transformational Leadership

The DTLI (Callow et al., 2009) measures followers' perspectives on TL behaviors. For this study, a modified version of the DTLI was used to evaluate coaches' perspectives of their own TL behaviors. Twenty-five statements from the DTLI began with "On this team, I…" followed by the behaviors being evaluated. Coaches were asked to reflect on their current experiences with their most recent or current team and rate their level of agreement with each statement on a scale from 1 (*not at all*) to 5 (*all of the time*). Sample items include, "I treat each team member as an individual," "I get my players to rethink the way they do things," and "I expect a lot from my team." Although the DTLI had not been used from the coaches' perspective in previous research, previous studies have used similar methods (same questionnaire with simple modifications) to adjust for the perspective of the participant (Bass & Avolio, 1997). Means for each subscale and a composite TL score were calculated.

The DTLI contains seven subscales: individual consideration (IC), inspirational motivation (IM), intellectual stimulation (IS), fostering acceptance of group goals and teamwork (AGG), appropriate role model (ARM), high performance expectations (HPE), and contingent reward (CR). This factor structure was supported using an adult population in competitive sport (Callow et al., 2009). Vella and colleagues (2012) validated a six-factor structure DTLI for Youth Sports (DTLI-YS) within a youth participation sport setting by removing the high performance expectations subscale. Based on the current population of interest, competitive youth sport environments, where performance is important, the original DTLI with the high performance expectations

subscale was used. The DTLI has displayed adequate reliability in previous research (Vella, Oades, & Crowe, 2012). Reliabilities for TL subscales in the current study are listed in Table 4.1.

Coaching Efficacy

Coaching efficacy was measured using the Coaching Efficacy Scale II for high school teams (CES II-HST; Myers et al., 2008). The CES II-HST consists of five subscales measured by 18 items that began with the stem, "In relation to the team you are currently coaching, how confident are you in your ability to…" Coaches responded to each statement based on a four-point confidence rating scale consisting of: 1 = low (confidence), 2 = moderate, 3 = high, and 4 = complete. Sample items include: "motivate your athletes for competition against a weaker opponent" (ME; motivation efficacy), "devise strategies that maximize the positive effects of your team's strengths during competition" (GSE; game strategy efficacy), "teach athletes the complex technical skills of your sport during practice" (TE; technique efficacy), "effectively instill an attitude of respect for others in your athletes" (CBE; character building efficacy), and "prepare an appropriate plan for your athletes' off-season physical conditioning" (PCE; physical conditioning efficacy). Means for each subscale and a composite coaching efficacy score were calculated. Reliabilities for coaching efficacy subscales in the current study are listed in Table 4.1.

Table 4.1

Intercorrelations, means, standard deviations, and reliabilities of transformational leadership, coaching efficacy, and goal orientations

Measure	Mean	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. IC	4.40	.46	.64													
2. IM	4.35	.48	.64**	.71												
3. IS	3.84	.69	.49**	.54**	.85											
4. AGG	4.32	.51	.64**	.82**	.49**	.66										
5. ARM	3.19	.37	.41**	.53**	.36**	.48**	.69									
6. HPE	4.06	.68	.19*	.38**	.37**	.37**	.38**	.64								
7. CR	4.35	.50	.47**	.60**	.45**	.44**	.36**	.09	.78							
8. ME	3.00	.49	.42**	.54**	.44**	.54**	.41**	.36**	.35**	.74						
9. TE	3.13	.55	.15	.37**	.36**	.28**	.44**	.33**	.23*	.42**	.79					
10. GSE	3.02	.56	.43**	.51**	.55**	.44**	.41**	.35**	.25**	.64**	.62**	.79				
11. CBE	3.47	.48	.37**	.47**	.32**	.40**	.26**	.16	.24**	.35**	.19*	.29**	.75			
12. PCE	2.62	.71	.16	.33**	.41**	.27**	.23*	.47**	.11	.56**	.49**	.37**	.23**	.81		
13. EGO	2.52	.71	-.06	-.02	.04	.04	.04	.12	-.11	.06	-.07	.05	.04	-.08	.77	
14. TASK	4.05	.46	.21*	.33**	.18*	.28**	.21*	.07	.35**	.33**	.26**	.17	.33**	.20*	.04	.69

Cronbach's alpha's are on the diagonal; * indicates significance at .05; ** indicates significance at .01

Coach Motivational Goal Orientations

Coaches' goal orientations were measured using a modified version of the Task and Ego Orientation for Sport Questionnaire (TEOSQ; Duda, 1989). Each question began with the stem, "I feel successful as a coach when…" and references to individuals in items were changed to team. The modified TEOSQ contains 13 items rated on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Means for each subscale will be calculated. Previous research reports indicate adequate reliability (Cronbach alphas 0.86 to 0.96) and construct validity (Duda & Nicholls, 1992; Li, Harmer, Duncan, Duncan, Acock, & Yamamoto, 1998). Reliabilities for task and ego orientation subscales in the current study are listed in Table 4.1.

Design and Analysis

Structural equation modeling (SEM) was employed to examine the relationships between goal orientations, coaching efficacy, and TL. Although SEM is generally a large sample technique ($n > 200$), Iacobucci (2010) and others (Bearden, Sharma & Teel, 1982; Bollen, 1990) suggest that this guideline may be overly simplistic. While I acknowledge that my sample size falls short of this guideline ($n = 123$), I also recognize the salience of other factors that influence the fit of a model, such as the reliability of measures and number of factors per indicator (Iacobucci, 2010).

All SEM analyses were conducted using the lavaan package (Rosseel, 2012) in R (version 3.1.2). Given the recommendation by Anderson and Gerbing (1988), I adopted a two-step approach comprised of calculating a measurement model followed by a structural model. First, the measurement model was tested using confirmatory factor

analyses (CFA) relating subscale scores (manifest variable) to their overarching construct (latent construct). Because task and ego goal orientations are typically unrelated and orthogonal constructs, they were treated as latent variables informed by item indicators of their respective subscales. I chose to parcel task and ego items to create a more parsimonious model and improve subscale reliability with fewer items (Little et al., 2002).

Second, the structural model was tested with relationships between latent constructs, as indicated in Figure 4.2. Model fit was assessed using the chi-square statistic, Tucker-Lewis index (TLI; Tucker & Lewis, 1973), comparative fit index (CFI; Bentler, 1990), root mean square error of approximation (RMSEA; Steiger & Lind,

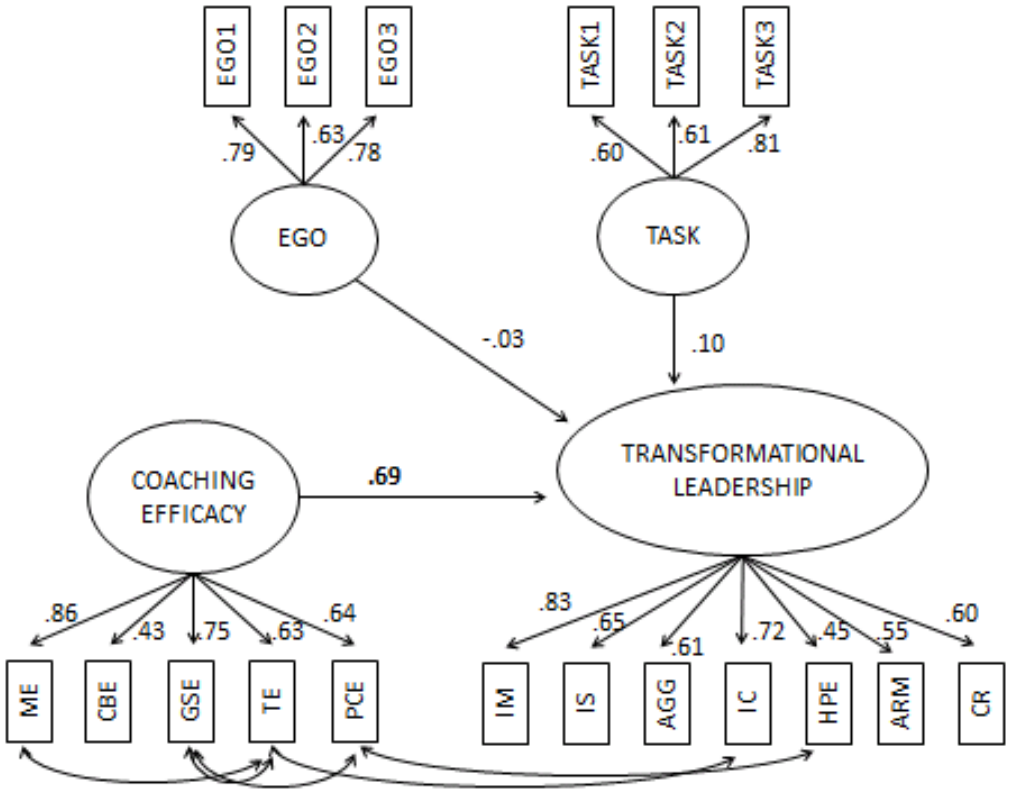

Figure 4.2 Structural equation model with item loadings and regression pathways

1980), and standardized root mean square residual (SRMR; Bentler, 1995). The chi-square statistic evaluates the overall model fit by comparing the correlation matrix of the observed model and implied model. A nonsignificant chi-square value indicates good fit. However, the chi-square index is heavily influenced by sample size, in that smaller sample sizes will rarely be nonsignificant (Bentler & Bonett, 1980; Hu & Bentler, 1998). Generally, higher values are acceptable for the TLI and CFI (> .90) and lower values are acceptable for the RMSEA and SRMR (< .08).

Results

Preliminary Analyses

During preliminary analyses, data were cleaned and screened for outliers. Less than 2% of the data were missing. Therefore, full information maximum likelihood estimation was used to account for missing data and the estimation of parameters. Multivariate assumptions of normality, linearity, and multicollinearity were examined using SPSS (version 20; IBM Corporation, 2011). Zero-order correlations between the subscales were examined. Following initial data inspection, means and standard deviations were calculated. A correlation table including means and standard deviations is provided in Table 4.1. Ego orientation was not significantly correlated with any other constructs, while task orientation was correlated with all of the TL and coaching efficacy subscales except HPE and GSE. Significant correlations ranged from .18 to .64, with the exception of the correlation between AGG and IM (.82).

I hypothesized that ME and CBE would have the strongest relationships with IM, IC, and ARM. All correlations between these constructs were significant and ranged from

.26 (CBE-ARM) to .54 (ME-IM). I also hypothesized that PCE, TE, and GSE would be positively related to TL subscales IM, IS, IC. Interestingly, correlations between PCE-IC and TE-IC did not reach significance. All other correlations between aforementioned constructs were significant ranging from .33 (PCE-IM) to .55 (GSE-IS).

Structural Equation Model

Confirmatory factory analysis was used to determine the fit of the data to the measurement model. Latent variables (task, ego, coaching efficacy, and TL) were identified by fixing their variances to 1, thereby standardizing values. The original measurement model was conceptualized without allowing subscales or constructs to covary. Loadings on the Task latent variable were unusually low (see Figure 4.2). This model yielded a poor fit of the data, $\chi^2 = (129, N = 122) = 264.64$, $p = .000$, TLI = .80, CFI = .83, RMSEA = .09 90% CI .08-.11, and SRMR = .08. Based on modification indices, certain construct subscales were allowed to correlate (Figure 4.2) to account for sample misfit. Residual covariance values between subscales within constructs ranged from -.07 to .09. For the relationships that stretched across constructs, HPE – PCE and TE – IC, the residual covariances were .12 and -.06, respectively. These cross-construct relationships seem logical. Sports are a physically demanding activity in which a high performance expectation would be associated with the ability to physically condition for optimal performance. Also, both technique instruction and individualized consideration necessitate personal interaction. After these modifications, a CFA indicated acceptable fit, $\chi^2 = (122, N = 122) = 190.19$, $p = .000$, TLI = .89, CFI = .91, RMSEA = .07 90% CI .05-.09, and SRMR = .07.

Next, the hypothesized full structural equation model was examined, with task orientation, ego orientation, and coaching efficacy predicting TL (Figure 4.2). The model yielded an acceptable fit, $\chi^2 = (122, N = 122) = 190.19$, $p = .000$, TLI = .89, CFI = .91, RMSEA = .07 90% CI .05-.09, and SRMR = .07. The regression pathway connecting coaching efficacy with TL was significant ($p < .05$). However, the relationship between task orientation and TL, and ego orientation and TL were not significant.

Discussion

Despite the mounting evidence of the effectiveness of TL as a successful leadership style in sport (Callow et al., 2009; Rowold, 2006; Smith et al., 2013; Vella, Oades, & Crowe, 2011), little is known about what factors might influence a coach to adopt transformational behaviors. According to Horn's model of coaching effectiveness (2008), coaches' beliefs, values, and goals are antecedents to coaching behaviors. In this study, TL was situated as a coaching behavior informed by two salient antecedent factors: motivational goal orientations (i.e., goals) and coaching efficacy (i.e., beliefs). In other words, it was anticipated that coaches' behaviors would likely be influenced by their personal perspectives on how success is achieved (goal orientations) and their belief in their ability to influence their athletes' learning and performance (coaching efficacy). Prior to the current study, these relationships had not been examined in sport.

Broadly, the data from this study provided an acceptable fit of the proposed model where coach goal orientations and coaching efficacy were measured as factors contributing to TL. Closer scrutiny of the resulting model and loadings revealed two general findings. First, coaching efficacy is strongly associated with the presence of TL

behaviors. Second, coaches' goal orientations were not significantly related to TL behaviors. Each of these findings will be discussed in greater detail in relation to the extant literature, and implications for future research and practice will be proposed.

Coaching Efficacy

According to Horn's model of coaching effectiveness (2008), coaches' beliefs inform coaching behaviors. My hypothesis was confirmed; coaching efficacy contributed to the adoption of TL. Coaching efficacy is a belief in the ability to affect the learning and performance of athletes. Therefore, this study extends an important theoretical link. Feltz and colleagues (1999) found that coaching efficacy was related to coaching behaviors, yet their observations of coach behavior did not identify specific styles of leadership. Nonetheless, they observed that coaches who reported having more coaching efficacy were more likely to give praise and encouragement than those who reported having lower coaching efficacy. In addition, Feltz et al. (1999) noted that coaches with a lower sense of coaching efficacy adopted more instructional- and organizational-based behaviors. These findings are salient in building intuitive connections to TL. Transformational leadership behaviors are often coupled with a charismatic interpersonal style that lifts and encourages followers. While the findings of Feltz et al. (1999) suggest implicit connections to transformational leader behaviors, the current study provides empirical evidence linking a high sense of coaching efficacy and TL behaviors.

It was also hypothesized that ME and CBE would be strongly correlated with the TL subscales IM, IC, and ARM. Interestingly, the correlations with CBE were among the lowest correlations, indicating that coaches' belief in their ability to build the character of

their athletes is not as strongly related to transformational behaviors as originally hypothesized. Conversely, these lower correlations may be an indication of an issue with the measure of either CBE or the entire DTLI itself.

Although no previous studies have examined the relationships between coaching efficacy and TL in sport, a variety of studies support the conceptual similarities between transformational and other leadership behaviors. Sullivan and colleagues (2012) connected self-reported coaching behaviors such as positive feedback (e.g., congratulate athletes after good plays), social support (e.g., encourage close and informal relationships with athletes), training and instruction (e.g., explaining to athletes the techniques and tactics of the sport), and situational consideration (e.g., adapting coach behaviors to the situation). Several of the subscales of TL seem to align with the behaviors measured in the work of Sullivan and colleagues. Positive feedback is akin to the TL subscale of contingent reward, where coaches acknowledge good performance of athletes. Social support seems similar to individualized consideration in TL, where coaches recognize the individual needs of athletes and concern for their feelings. Training and instruction may be linked to intellectual stimulation in TL because while coaches provide instruction and tactical information for athletes, they are inviting deepened intellectual engagement from the athletes. Finally, situational consideration may be reflected in the overarching idea of TL that coaches are willing to make adjustments based on the needs of athletes for the good of the collective whole. These connections have been suggested by previous research as well (Callow et al. 2009; Yukelson, 1997).

Given that the relationship between coaching efficacy and TL is relatively unexplored, examining research in other domains may be valuable. Connections between

leader efficacy and leadership behaviors have been made in educational research on school principals (Leithwood & Jantzi, 2008), where leader self-efficacy explained about 12% of the variation in leader behavior. Leithwood and Jantzi's definition of successful leadership was guided by four main concepts – setting directions, developing people, redesigning organization, and management effectiveness. Setting directions and developing people are relationship-oriented, while redesigning organization and management effectiveness are task-oriented (Halpin & Winter, 1957; Northouse, 2013). Transformational leadership is sometimes considered an augmentation of transactional leadership, in that leaders who have developed basic leadership skills (i.e., organizational skills) will focus on the interpersonal issues that may lift a group to a higher level (Dvir, Eden, Avolio, & Shamir, 2002; Waldman, Bass, & Yammarino, 1990). Again, connections between these concepts and TL behaviors are appropriate, such as being a role model and individualized consideration. The current study extends our knowledge on leadership by connecting coaching efficacy with an explicit set of behaviors within the TL paradigm.

Motivational Goal Orientations

In this study, goal orientations were considered antecedents to coach TL behaviors, per Horn's model (2008). The regression paths in the model linking task and ego orientations with TL were not significant. Thus, my hypotheses were not supported. Given the lack of support for these hypotheses, some speculative explanations will be offered in connection to previous literature.

One explanation for the lack of significant findings in relation to goal

orientations is methodological. When compared with previous studies, the reliabilities of the task and ego orientation subscales in this study were unusually low. Evidence suggests high reliability and strong validity in previous work with the TEOSQ (Duda & Whitehead, 1998; Gano-Overway & Ewing, 2004). The lack of adequate loadings may be due to the relatively small sample size or some unique characteristic of the sample that caused low factor loadings. In their study of the factor reliability of the TEOSQ in multiple samples, Chi and Duda (1995) concluded that the TEOSQ may be "unequally valid" (p. 97) across different samples. Thus, modifications to the TEOSQ based on sample (i.e., parent, coach) have been made in previous research and have resulted in adequate reliability (Givvin, 2001).

Another explanation might be related to potential mediating variables. In this study, goal orientations were viewed as a part of coaches' expectancies and goals (Horn, 2008), and therefore, directly linked to leadership. In studies outside of sport, leader efficacy has been identified as a mediator of the relationship between goal orientations and leadership behaviors (Hendricks & Payne, 2007). An additional mediating variable in this relationship may be the influence of organizational pressures on coaches or even influences of parents and peer coaches, which are characterized in Horn's model as considerations dealing with organizational climate or sociocultural context. Future research should examine the role of goal orientations as a contributor to coaching efficacy, and the potential of mediating variables in the relationship between coach goal orientation and TL.

Practical Implications

The current study offers valuable insights for sport psychology practitioners and coaches. First, building a high sense of coaching efficacy is an important part of establishing TL behaviors. Based on the design of the study, practitioners should use caution in suggesting a cause-and-effect relationship between coaching efficacy and TL. However, beliefs (e.g., coaching efficacy) are thought to inform behaviors (Bandura, 1977). Therefore, it seems prudent to invest time in building a greater sense of coaching efficacy, given the positive outcomes associated with athletes who are led by transformational coaches. Sources of coaching efficacy include coaching experience, coaching education, and perceived social support from the community and parents (Feltz et al., 1999; Sullivan et al., 2012). Previous research suggests that a viable means of enhancing coaching efficacy may be through implementation of and participation in coaching education programs for youth sport coaches (Lemyre, Trudel, & Durand-Bush, 2007; Vargas-Tonsing, 2007). The National Association of Sport and Physical Education (NASPE) coaching standards suggest competencies for best practices in coaching. Many of these competencies overlap with coaching efficacy such as, philosophy and ethics, physical conditioning, teaching and communication, and sport skills and tactics (National Association for Sport and Physical Education, 2006). Adopting these standards may provide a valuable resource for enhancing coaching efficacy.

Although the role of the sport psychology consultant might initially be regarded as a mental skills coach, it is critical to recognize the possible spectrum of circumstances that may need resolution, including interpersonal aspects of coaching (Poczwardowski, Barrot, & Henschen, 2002). Sport psychology practitioners should develop basic

competencies in working with coaches on developmental issues, facilitating communication among parents, athletes, and coaches, and making connections between mental training skills used in athletics and life (Miller & Kerr, 2002). In short, preparation for sport psychology consultants should include more than knowledge of traditional mental skills, such as relaxation and imagery (Tod, 2007; Wylleman, Harwood, Elbe, Reints, & Caluwé, 2009).

Conclusion

Overall, this research proposed a model with coaching efficacy and goal orientations contributing to TL behaviors in coaches of youth basketball teams. A strong relationship was found between coaching efficacy and TL, suggesting that coaches with a higher sense of belief in their abilities to affect the learning and performance of their athletes are more likely to inspire and challenge their athletes, foster acceptance of team goals, act as an appropriate role model, and lead with care for individual athletes' needs. The lack of significant relationships between goal orientations and TL warrants further investigation. Specifically, additional studies should consider using a larger sample size and delimiting participant characteristics to further investigate the link between coaches' goal orientations and TL. In the future, researchers should also explore experimental designs that implement a coaching efficacy intervention, while measuring TL to determine cause and effect. Additional research on the contributions of specific parts of coaching efficacy (e.g., game strategy efficacy, character building efficacy) to TL is also needed. Future research should also explore the role of tripartite efficacy in connection to TL, given the central role of relational efficacy in coach-athlete interactions (Jackson,

Gucciardi, & Dimmock, 2011; Jackson, Knapp, & Beauchamp, 2009). Tripartite efficacy beliefs include other-efficacy (beliefs about significant other's ability to perform a task), relation-inferred efficacy (one person's belief in how his/her capabilities are viewed by another person), and self-efficacy (Lent & Lopez, 2002). This study is significant because it is the first to examine connections between TL in coaching and possible antecedents (goal orientations and coaching efficacy).

CHAPTER 5

CONCLUSION

The purpose of this dissertation was to expand our understanding of TL in sport through an examination of transformational behaviors in sport, outcomes associated with TL in youth sport, and potential contributing factors to the development of TL. Ultimately, these studies augment our understanding of how to foster positive sport experiences for young athletes by tapping into one of the most significant pieces of the youth sport experience – coaches. Specifically, a three-study approach was used to examine: (1) the essence of transformational coaching in sport, (2) the influence of TL on positive youth development within and beyond sport, and (3) motivational goal orientation and coaching efficacy as possible predictors of TL. This chapter is comprised of a summary of each study, future directions, and implications of this research.

Summary

Study 1

The focus of this study was to examine the nature of TL in sport using a qualitative perspective. Eleven female collegiate athletes were interviewed about their positive experiences with current or former coaches. Thematic analysis of transcribed

interview text revealed four major themes: caring, motivating, teaching life lessons, and trusting. Caring was exemplified by the coach taking the time and energy to establish a personal and individual relationship with athletes. Having high expectations and physically and mentally challenging athletes were salient aspects of motivating. Teaching life lessons was characterized generally by the high-quality mentoring that transformative coaches engaged in with athletes. Lastly, trust was perceived when the athletes felt their coaches cared about them, were willing to relinquish some power, and acted in the best interests of the team. Similarities and differences emerged when comparing the themes with Bass'(1985), Podsakoff et al.'s (1990), and Rafferty and Griffin's (2004) components of TL. Unique elements of sport that may affect the manifestation of TL in sport include physical coach-athlete interactions, group size, and the motivational reasons for participation.

Study 2

The purpose of this study was to examine the contribution of coach TL to PYD both as a direct result (YES-S) and beyond sport (PYD-VSF). Twenty-eight competitive youth basketball teams at a summer tournament in the United States completed questionnaires about their coaches' TL and two measures of positive youth development. Multilevel analysis indicated that coach TL contributed to positive youth development as a direct result of ($\beta = 0.18$, $p < .001$) and outside of sport ($\beta = 0.27$, $p = .002$). Cross-level (individual by team) interactions of TL were present for PYD-VSF outcomes ($\beta = .62$, $p < 0.001$). A cross-level interaction of individual age and team age division was present for both PYD-VSF ($\beta = .04$, $p < 0.001$) and YES-S ($\beta = -0.02$, $p = 0.007$) outcomes.

Individual perceptions of greater coach TL led to greater positive youth development when using both the YES-S and PYD-VSF measures. Interestingly, there was no significant interaction effect between individual and team level TL for YES-S scores, yet there was a significant cross-level interaction effect for PYD-VSF scores. These results provide support for previous literature on TL and positive youth development, and offer new insights based on the multilevel analysis of positive youth development both within sport and outside of the sport setting.

Study 3

This study approached TL as a coaching behavior informed by two salient antecedent factors: motivational goal orientations and coaching efficacy. In other words, are coaches' behaviors influenced by their personal perspectives on how success is achieved (goal orientations) and their belief in their ability to influence athletes' learning and performance (coaching efficacy)? Male and female head coaches (N = 122) of boys' and girls' basketball teams (age 12 to 18) from across the United States completed an online questionnaire comprised of the DTLI, TEOSQ, and CES. Using structural equation modeling, goal orientations and coaching efficacy were examined as antecedents of TL. The model yielded an acceptable fit, $\chi 2$ = (122, n = 122) = 190.19, p < .001, CFI = .91, and SRMR = .07. The regression pathway connecting coaching efficacy with TL was significant (r = 0.69, p < .01). However, neither regression pathway between the goal orientations and TL was significant. These results suggest that sport psychology practitioners can increase coaches' TL behaviors by promoting their sense of coaching efficacy.

Implications

It is clear that TL is a means of positively influencing and optimizing athletic experiences. Coaches who adopt this leadership style are likely to have meaningful impacts on the lives of athletes. Given the possibility for negative interactions with coaches in sport and the subsequent need to foster positive experiences, the implications of this research are significant. Connections have been made among these studies and also in previous research linking transformational coaching with positive outcomes. Thus, the major implication of this knowledge is that fostering TL in sport coaches is valuable in shaping positive experiences for athletes.

Optimizing youth sport experiences through positive coaching may lead to lower drop-out rates in youth sport. For youth who choose to participate in sporting activities and have experiences with transformational coaches, a plethora of constructive outcomes are likely. Some of these may include greater self-confidence, more physical activity, learning valuable life lessons, creating important social connections, and developing interpersonal skills. An additional benefit to having transformational coaches in sport may be a greater push towards facilitating better sportsmanship and ethical decisions in sports. Because part of being a transformational coach is acting as an appropriate role model, young athletes may learn important lessons about morality and ethics from their coaches' examples. In sum, having a transformational coach for youth athletes is a powerful way to enable a host of positive consequences.

An additional implication of this research is that developing a greater sense of coaching efficacy may contribute to becoming a transformational coach. It may also be the case that developing characteristics of a transformational leader would lead to a

greater sense of coaching efficacy. Due to the cross-sectional design of these studies, the direction of influence is unknown. Regardless, the relationship between coaching efficacy and TL is strong. Therefore, coach education should be a focus of youth sport organizations. Fostering specific competencies in youth sport coaches such as understanding developmental issues, making connections between mental skills used in athletics with those used in life, and facilitating communication among parents, athletes, and coaches are all important practical implications of this research (Miller & Kerr, 2002).

APPENDIX A

STUDY 2 CONSENT FORM

Consent Document

BACKGROUND

You are being asked to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether you would like to take part in this study.

The purpose of this study is to examine the relationship between your perception of your coach's behavior and developmental outcomes. Specifically, we are interested in the influence of your coach in developing qualities that will enhance positive characteristics and skills among youth. Coaches are integral the experience you have in this particular sport and can potentially influence your life. By investigating coach leadership in sports, we hope to provide some strategies in which coach education and performance can be enhanced.

This study is being completed by Aubrey Newland, MS. She is a PhD candidate studying sport and exercise psychology in the Department of Exercise and Sport Science at the University of Utah. She will be assisted by a team of qualified researchers.

STUDY PROCEDURE

It should take you about 20 minutes to the complete the study. You will be asked to complete a number of questionnaires at the Salt Lake Big Mountain Jam basketball tournament. Your coach will not be allowed to see the responses you provide. You will not put your name on the questionnaires. There are no right or wrong answers to the questions. You will be asked questions about their coach's leadership behaviors, your experiences in the sport, and the qualities you have developed as a person.

RISKS

The risks of this study are minimal. You may feel a bit uneasy or embarrassed about expressing feelings about the coach during their athletic season. These reactions are normal in athletic settings. If you feel upset from this experience, you can tell the researcher and he/she will assist you.

BENEFITS

There are no direct benefits for taking part in this study. However, we hope that the information we get from this study may help develop a greater understanding of how coaches influence the development of youth coach in sports.

CONFIDENTIALITY

Your data will be kept confidential. Data and records will be stored in a locked filing cabinet or on a password protected computer located in the researcher's work space. Only the researcher and members of his/her study team will have access to this information.

PERSON TO CONTACT

If you have questions, complaints, or concerns about this study, you can contact Aubrey Newland at 801-309-1519. Additionally, if you feel you have been harmed as a result of participation, please call Aubrey Newland at the number above (available 24 hours a day).

INSTITUTIONAL REVIEW BOARD

Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

VOLUNTARY PARTICIPATION

It is up to you to decide whether to take part in this study. Refusal to participate or the decision to withdraw from this research will involve no penalty or loss of benefits to which you are otherwise entitled. This will not affect your relationship with the investigator or your team membership.

CONSENT

By signing this consent form, I confirm I have read the information in this consent form and have had the opportunity to ask questions. I will be given a signed copy of this consent form. I voluntarily agree to take part in this study.

_____
Printed Name of Participant

_____ _____
Signature of Participant Date

_____
Printed Name of Researcher or Staff

_____ _____
Signature of Researcher or Staff Date

APPENDIX B

DIFFERENTIATED TRANSFORMATIONAL LEADERSHIP INVENTORY

Team No. _____

Differentiated Transformational Leadership Inventory

The following questions will ask you about **your current coach**. Please **CIRCLE** a number from 1 to 5 to show how much you agree with each statement **in general**.

My coach…

1. Treats each team member as an individual.

1	2	3	4	5
Not at all				All of the time

2. Talks optimistically about the future.

1	2	3	4	5
Not at all				All of the time

3. Helps team members to develop their strengths.

1	2	3	4	5
Not at all				All of the time

4. Talks in a way that makes me believe that I can succeed.

1	2	3	4	5
Not at all				All of the time

5. Gives me special recognition when I do very good work.

1	2	3	4	5
Not at all				All of the time

6. Talks enthusiastically about what needs to be accomplished.

1	2	3	4	5
Not at all				All of the time

7. Gives us praise when we do good work.

1	2	3	4	5
Not at all				All of the time

8. Gets me to rethink the way that I do things.

1	2	3	4	5
Not at all				All of the time

9. Praises athletes when they show improvement.

1	2	3	4	5
Not at all				All of the time

10. Shows performers how to look at difficulties from a new angle.

1	2	3	4	5
Not at all				All of the time

11. Considers that I have different strengths and abilities from others.

1	2	3	4	5
Not at all				All of the time

12. Encourages athletes to be team players.

1	2	3	4	5
Not at all				All of the time

13. Expects a lot from us.

1	2	3	4	5
Not at all				All of the time

14. Develops a strong team attitude and spirit among team members.

1	2	3	4	5
Not at all				All of the time

15. Recognizes that different athletes have different needs.

1	2	3	4	5
Not at all				All of the time

16. Leads by example.

1	2	3	4	5
Not at all				All of the time

17. Expects us to achieve high standards.

1	2	3	4	5
Not at all				All of the time

18. Expresses confidence that goals will be achieved.

1	2	3	4	5
Not at all				All of the time

19. Leads from the front whenever he/she can.

1	2	3	4	5
Not at all				All of the time

20. Challenges me to think about problems in new ways.

1	2	3	4	5
Not at all				All of the time

21. Will not settle for second best.

1	2	3	4	5
Not at all				All of the time

22. Gets the team to work together for the same goal.

1	2	3	4	5
Not at all				All of the time

23. Leads by ‘doing’ rather than simply ‘telling’.

1	2	3	4	5
Not at all				All of the time

24. Is a good role model for me to follow.

1	2	3	4	5
Not at all				All of the time

25. Always recognizes our achievements.

1	2	3	4	5
Not at all				All of the time

Three items from the Multifactor Leadership Questionnaire (MLQ) included by permission from the publisher www.mindgarden.com Copyright 1995 by Avolio and Bass.

APPENDIX C

YOUTH EXPERIENCES SURVEY FOR SPORT

Youth Experiences Survey for Sport

Based on your experience in the sport of **basketball**	**Not at all**	**A little**	**Quite a bit**	**Yes definitely**
1. I became better at giving feedback.	1	2	3	4
2. I became better at taking feedback.	1	2	3	4
3. I became better at sharing responsibility.	1	2	3	4
4. I learned that working together requires some compromising.	1	2	3	4
5. I learned to be patient with other group members.	1	2	3	4
6. Others in this activity counted on me.	1	2	3	4
7. I learned about the challenges of being a leader.	1	2	3	4
8. I learned about helping others.	1	2	3	4
9. I learned that it is not necessary to like people in order to work with them.	1	2	3	4
10. I made a new friend.	1	2	3	4
11. I got to know people in the community.	1	2	3	4
12. I learned I had a lot in common with people from different backgrounds.	1	2	3	4
13. I had good conversations with my parents/guardians because of this activity.	1	2	3	4
14. I learned how my attitudes and emotions affect others in the group.	1	2	3	4
15. I improved skills for finding information.	1	2	3	4
16. I improved academic skills.	1	2	3	4
17. I improved computer internet skills.	1	2	3	4
18. I improved creative skills.	1	2	3	4
19. This activity increased my desire to stay in school.	1	2	3	4
20. I learned to find ways to reach my goals.	1	2	3	4
21. I set goals for myself in this activity.	1	2	3	4
22. I learned to consider challenges when making future plans.	1	2	3	4
23. I observed how others solved problems and learned from them.	1	2	3	4

	Not at all	**A little**	**Quite a bit**	**Yes definitely**
24. I learned to push myself.	1	2	3	4
25. I learned to focus my attention.	1	2	3	4
26. I put all my energy into this activity.	1	2	3	4
27. I improved athletic or physical skills.	1	2	3	4
28. I was treated differently because of my gender, race, ethnicity, disability, or sexual orientation.	1	2	3	4
29. Adult leaders in this activity were controlling or manipulative.	1	2	3	4
30. Adult leaders scared me.	1	2	3	4
31. Adult leaders made personal comments that made me mad.	1	2	3	4
32. Adult leaders encouraged me to do something I believed morally wrong.	1	2	3	4
33. Other youth in this activity made inappropriate sexual comments, jokes, or gestures.	1	2	3	4
34. Youth in this activity got me into drinking alcohol or using drugs.	1	2	3	4
35. I got stuck doing more than my fair share.	1	2	3	4
36. There were cliques in this activity.	1	2	3	4
37. This activity has stressed me out.	1	2	3	4

APPENDIX D

POSITIVE YOUTH DEVELOPMENT – VERY SHORT FORM

Positive Youth Development-VSF

In general…

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
1. I have a lot of friends.	○	○	○	○	○
2. I do very well in my class work at school.	○	○	○	○	○
3. I am better than others my age at sports.	○	○	○	○	○
4. I am happy with myself most of the time.	○	○	○	○	○
5. I hardly ever do things I know I shouldn't do.	○	○	○	○	○
6. I really like the way I look.	○	○	○	○	○
7. All in all, I am glad I am me.	○	○	○	○	○
8. I want to make the world a better place to live.	○	○	○	○	○
9. I accept responsibility for my actions when I make a mistake or get in trouble.	○	○	○	○	○
10. I enjoy being with people of a different race.	○	○	○	○	○
11. When I see someone being taken advantage of, I want to help them.	○	○	○	○	○
12. When I see someone being picked on, I feel sorry for them.	○	○	○	○	○
13. When I see another person who is hurt or upset, I feel sorry for them.	○	○	○	○	○
14. I receive a lot of encouragement at my school.	○	○	○	○	○
15. I am a useful and important member of my family.	○	○	○	○	○
16. I feel like an important member of my local community.	○	○	○	○	○
17. I feel my friends are good friends.	○	○	○	○	○

APPENDIX E

STUDY 2 DEMOGRAPHIC QUESTIONS

Please answer the following questions about yourself.

How old are you? _____

I am: male ____ female ____

Your race/ethnicity:

African American _____ Caucasian _____

Hispanic _____ Asian American _____

Pacific Islander _____ Other _____

My coach is: male _____ female _____

How long have you been playing for this coach? _____

In this tournament so far, we have played:

_____ 0 games (just arrived)

_____ 1 game

_____ 2 games

_____ 3 games

_____ 4 games

_____ more than 4 games

If you played a game right before (less than 30 minutes ago) taking this survey, did you win _____? or lose _____?

What is your record at this tournament? wins _____ losses _____

We haven't played yet. _____

Other than basketball, which sports do you play? (Mark all that apply.)

soccer _____ football _____ volleyball _____ baseball/softball _____

lacrosse _____ hockey _____ other _____

APPENDIX F

STUDY 3 CONSENT FORM

Consent Cover Letter

Examining Antecedents of Transformational Leadership in Sport

The purpose of this research study is to examine factors that contribute to leadership behaviors. We are doing this study because there is a need to understand how coaches are able to influence the lives of their athletes and how to maximize the possibility that athletes have a positive youth sport experience.

I would like you to complete several surveys. The surveys assess how your leadership behaviors align with a specific type of leadership, your beliefs about your ability to influence your athletes' learning and performance, and the ways in which you define success. There are no known risks to participating in this study. By participating in this study you have the opportunity to be entered into a drawing for one of five $25 gift cards to Olive Garden.

No identifying information will be asked of you in this questionnaire. In addition, all questionnaires will be kept confidential and stored on a secure server on password-protected computers. Only the Principal Investigator and her research team will see the questionnaires. Information reported on the surveys will not be shared directly with any of your superiors.

If you have any questions complaints or if you feel you have been harmed by this research please contact Aubrey Newland, Department of Exercise and Sport Science, University of Utah, 801-309-1519.

Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

It should take no more than 10-15 minutes to complete the questionnaire. Participation in this study is voluntary. You can choose not to take part. You can choose not to finish the questionnaire or omit any question you prefer not to answer without penalty or loss of benefits.

By completing this questionnaire, you are giving your consent to participate.

Your participation in this survey is greatly appreciated.

APPENDIX G

DIFFERENTIATED TRANSFORMATIONAL LEADERSHIP INVENTORY (COACH)

Differentiated Transformational Leadership Inventory - Coach

The following questions will ask you about **your behaviors with your current team**. Please **CIRCLE** a number from 1 to 5 to show how much you agree with each statement.

1. I treat each team member as an individual.

1	2	3	4	5
Not at all				All of the time

2. I talk optimistically about the future.

1	2	3	4	5
Not at all				All of the time

3. I help team members to develop their strengths.

1	2	3	4	5
Not at all				All of the time

4. I talk in a way that makes team members believe that they can succeed.

1	2	3	4	5
Not at all				All of the time

5. I give players special recognition when they do very good work.

1	2	3	4	5
Not at all				All of the time

6. I talk enthusiastically about what needs to be accomplished.

1	2	3	4	5
Not at all				All of the time

7. I give my team praise when they do good work.

1	2	3	4	5
Not at all				All of the time

8. I get them to rethink the way that they do things.

1	2	3	4	5
Not at all				All of the time

9. I praise athletes when they show improvement.

1	2	3	4	5
Not at all				All of the time

10. I show players how to look at difficulties from a new angle.

1	2	3	4	5
Not at all				All of the time

11. I consider that each player has different strengths and abilities from others.

1	2	3	4	5
Not at all				All of the time

12. I encourage athletes to be team players.

1	2	3	4	5
Not at all				All of the time

13. I expect a lot from them.

1	2	3	4	5
Not at all				All of the time

14. I develop a strong team attitude and spirit among team members.

1	2	3	4	5
Not at all				All of the time

15. I recognize that different athletes have different needs.

1	2	3	4	5
Not at all				All of the time

16. I lead by example.

1	2	3	4	5
Not at all				All of the time

17. I expect players to achieve high standards.

1	2	3	4	5
Not at all				All of the time

18. I express confidence that goals will be achieved.

1	2	3	4	5
Not at all				All of the time

19. I lead from the front whenever I can.

1	2	3	4	5
Not at all				All of the time

20. I challenge players to think about problems in new ways.

1	2	3	4	5
Not at all				All of the time

21. I will not settle for second best.

1	2	3	4	5
Not at all				All of the time

22. I get the team to work together for the same goal.

1	2	3	4	5
Not at all				All of the time

23. I lead by 'doing' rather than simply 'telling'.

1	2	3	4	5
Not at all				All of the time

24. I am a good role model for players to follow.

1	2	3	4	5
Not at all				All of the time

25. I always recognize team members' achievements.

1	2	3	4	5
Not at all				All of the time

Three items from the Multifactor Leadership Questionnaire (MLQ) included by permission from the publisher www.mindgarden.com Copyright 1995 by Avolio and Bass.

APPENDIX H

TASK AND EGO ORIENTATION FOR

SPORT QUESTIONNAIRE

Task and Ego Orientation for Sport Questionnaire

Directions: Please think of a time when you felt most successful as a coach in sports. Read the following statements and rate your level of agreement for each item. Please be as honest as you can. There is no right or wrong answer. Your honest answers will help provide accurate results.

I feel most successful as a coach when…	**Strongly disagree**				**Strongly agree**
1. My team is the only one who can do the play or skill.	1	2	3	4	5
2. Players learn a new skill and it makes them want to practice more.	1	2	3	4	5
3. My team can do better than those around them.	1	2	3	4	5
4. Other teams can't do as well as mine.	1	2	3	4	5
5. Players learn something that is fun to do.	1	2	3	4	5
6. Others teams mess up and mine doesn't.	1	2	3	4	5
7. Players learn a new skill by trying hard.	1	2	3	4	5
8. Players work really hard.	1	2	3	4	5
9. My team scores the most points.	1	2	3	4	5
10. Something players learn makes them want to go and practice more.	1	2	3	4	5
11. My team is the best.	1	2	3	4	5
12. A skill players learn really feels right.	1	2	3	4	5
13. My team does their very best.	1	2	3	4	5

APPENDIX I

COACHING EFFICACY SCALE II –

HIGH SCHOOL TEAMS

Coaching Efficacy Scale II – High School Teams

In relation to the team that you are currently coaching, how confident are you in your ability to…

	Low Confidence	Moderate Confidence	High Confidence	Complete Confidence
1. motivate your athletes?	1	2	3	4
2. devise strategies that maximize the positive effects of your team's strengths during competition?	1	2	3	4
3. teach athletes the complex technical skills of basketball during practice?	1	2	3	4
4. effectively instill an attitude of respect for others in your athletes?	1	2	3	4
5. prepare an appropriate plan for your athletes' off-season physical conditioning?	1	2	3	4
6. help your athletes to not become overly confident in their ability to perform when they are performing well?	1	2	3	4
7. make effective strategic decisions in pressure situations during competition?	1	2	3	4
8. detect subtle technique errors by your athletes during practices?	1	2	3	4
9. positively influence the character development of your athletes?	1	2	3	4
10. implement an appropriate endurance program for your athletes during the season?	1	2	3	4
11. help your athletes to maintain confidence in their	1	2	3	4

ability to perform when they are performing poorly?				
12. make effective personnel substitutions during competition?	1	2	3	4
13. teach athletes appropriate basic technique during practices?	1	2	3	4
14. effectively promote good sportsmanship in your athletes?	1	2	3	4
15. accurately assess your athletes' physical conditioning?	1	2	3	4
16. motivate your athletes for competition against a weak opponent?	1	2	3	4
17. devise strategies that minimize an opposing team's strengths during competition?	1	2	3	4
18. instruct all of the different positional groups of your athletes on appropriate technique during practices?	1	2	3	4

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